

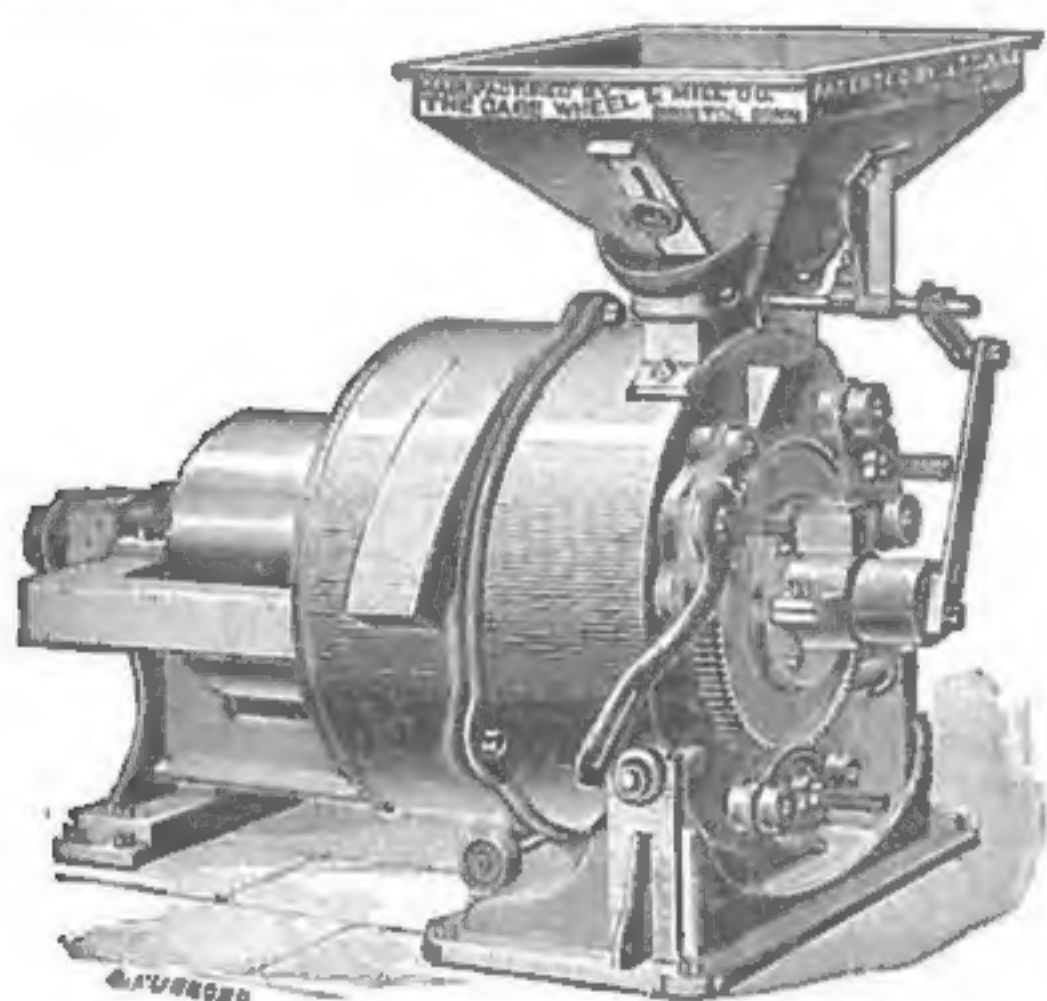
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXI. No. 2.

BUFFALO, N. Y., SEPTEMBER 9, 1889.

\$1.50 PER YEAR.



VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS.

(J. T. CASE'S PATENT.)

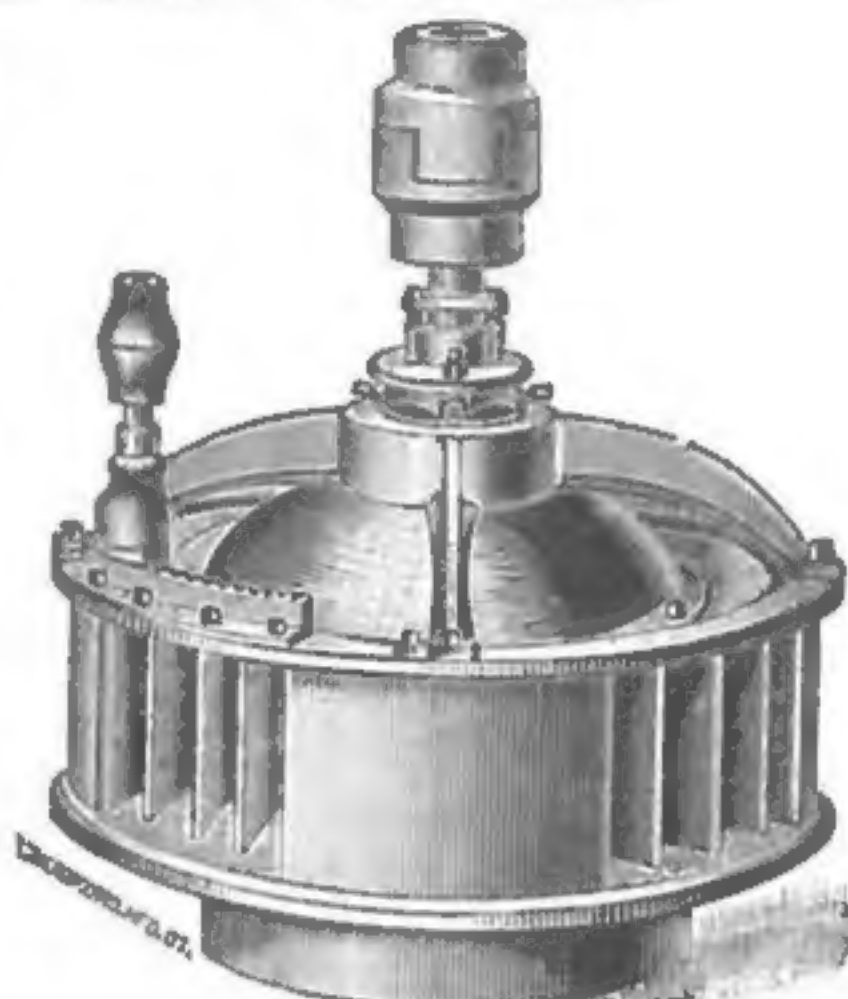
FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.
"Superior to any mill in use."—Geo. Weston, Bristol, Conn.
"The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.
"We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.

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The Improved National Turbine Water Wheel

The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.



The Case Wheel & Mill Co., Bristol, Conn.

THE SUCCESS

BOLTER AND DRESSER

THE J.B. ALLFREE

TWO-REEL SCALPER

WE BUILD

**FLOUR MILLS,
CORN MILLS
AND
HOMINY MILLS**

WE FURNISH

**EITHER THE
SHORT,
MEDIUM
OR
LONG SYSTEM**

THE ALLFREE

CENTRIFUGAL REEL

THE SUCCESS

CORN MEAL BOLT

KEYSTONE

FOUR-ROLLER WHEAT MILL

ROLLS REGROUND AND REGORRUGATED.

THE KEYS

FOUR-HIGH ROLLER

THE KEYS

FOUR-HIGH ROLLER

THE ALLFREE AUTOMATIC ENGINE

THE BEST MILL ENGINE IN THE WORLD.

SEND FOR A NEW ILLUSTRATED CATALOGUE.

ADDRESS, **THE J.B. ALLFREE CO.**

INDIANAPOLIS, IND. U.S.A.

THE KEYS

FOUR-HIGH ROLLER

THE KEYS

FOUR-HIGH ROLLER

THE LITTLE HOOPER

SMALL MILL

SHAFTING, GEARING, AND PULLEYS

FURNISHED AT LOW PRICES

THE J.B. ALLFREE

MILL ENGINE

BRAINS, BRAWN AND PLUCK WILL ACCOMPLISH WONDERS, — BUT — THEY DON'T COUNT FOR MUCH IN MILLING WITHOUT CASE MACHINERY.

This fact is so well established that Arguments are not necessary.

WHERE CAN YOU FIND ITS EQUAL?

Find a good roller miller who has run the different systems and makes of mills, and ask him which he prefers to run and which will produce the best flour. His answer will be every time

"A CASE MILL DOWNS THEM ALL"

Millers who think of putting in a Roller Outfit or of buying more machinery,

PONDER WELL BEFORE BUYING,

And remember that even if you DO save a few dollars on your contract by buying inferior machinery, WE DON'T CARE WHAT GUARANTEES THEY MAKE, those few dollars saved will lose you as many hundreds before you are through with your BARGAIN, and DON'T FORGET IT. Give us your contract, and if we don't give you a mill that will fill or exceed our guarantee, you needn't pay for it, for

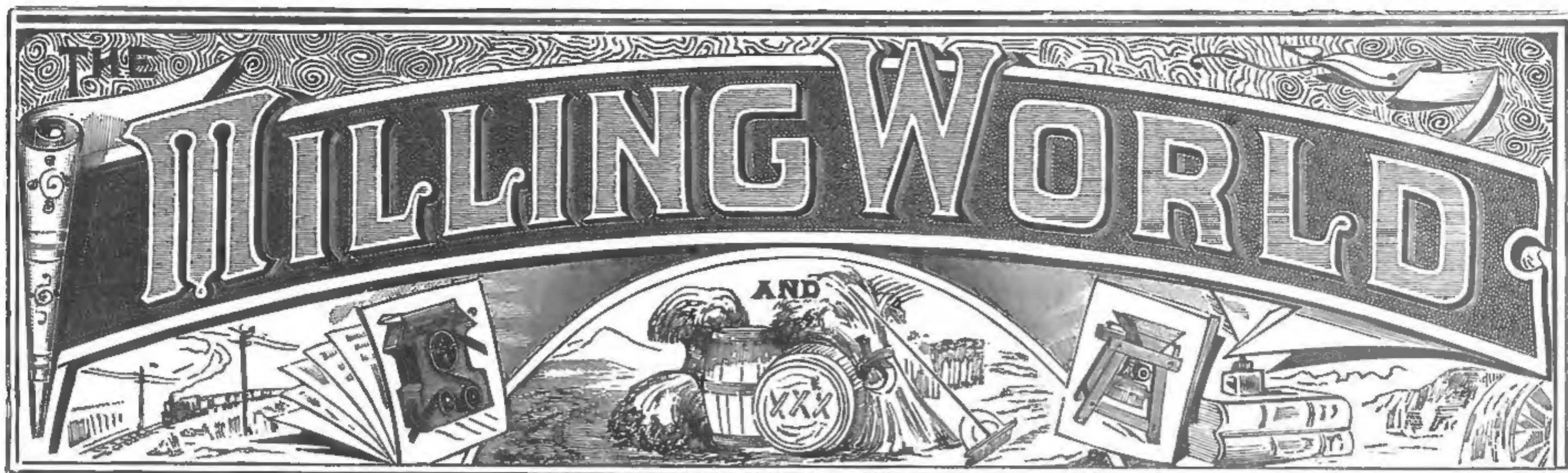
WE WILL SATISFY YOU EVERY TIME.

Mill Supplies of all kinds at Low Prices. Rolls Re-Ground and Re-Corrugated with Accuracy & Dispatch.

Write Us for Anything you need and We will look after Your Interests.

THE CASE MFG. CO., COLUMBUS, O.

PLEASE MENTION "THE MILLING WORLD."



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THE United States wheat crop continues to hold its own among the "expert" guessers, estimators and ursine gamblers. It is now labeled 500,000,000 bushels. Well, can a country really have "too much of a good thing"?

THE chin wheat crop of the bears ranges from 500,000,000 up to 700,000,000 bushels. The chin crop of the bulls ranges from 500,000,000 down to 450,000,000 bushels. Between the two limits is a difference of 250,000,000 bushels, and the chinners will have considerable elbow-room on that respectable difference.

QUARRELING over the alleged shortage in the European wheat crop will accomplish nothing. Wrangling about the control of the Austro-Hungarian grain trade by Jews or the control of the Russian grain trade by Germans and Austro-Hungarians will settle nothing. The millers of the United States are interested in finding out how much wheat the crop of 1889 turned out. They know that supply and demand will settle prices and business conditions, and the conflict of the bulls and bears will interest them slightly or not at all.

NIPPED by frost and burned by drouth, after several consecutive seasons of big promise and little performance in growing wheat, Manitoba begins to reduce her figures of average yield of wheat per acre. Heretofore the Manitoba claim has been 30 bushels and more to the acre, but this year that figure is reduced to 14.8 bushels to the acre. The province reports 623,245 acres sown to wheat this year, and the latest "official estimate" of the yield sets it at 8,725,000 bushels, with 1,000,000 bushels more in Assiniboia, making a total crop of less than 10,000,000 bushels in the vaunted Northwest. This is a great "come-down," and it suggests the hope that in the future there may be no repetition of the mendacious chestnut about "30 bushels to the acre" as the average yield of Canada wheat.

WHAT has gone wrong with the new-system millers? It is months since an "entirely new and epoch-making revolution in milling" has been announced. Meanwhile, the weekly grist of inventions patented includes the usual discouragingly large number of automatic grain-weighers. To one who reads the weekly Patent Gazette it seems that every man in the land, who has an atom of inventive gray matter in his cerebrum, is impressed with the idea that the capital want of the human race in this nineteenth century is automatic grain-weighing machines. The only other things that approach the automatic grain-weighing machine in frequency in the pages of the Gazette are safety-pins and teething-rings for babies. All hail the age of safety-pins, teething-rings and automatic grain-weighing machines!

VARIETY is the spice of life, that gives its season to it. Here is a Chicago man's view of the grain situation. After figuring out a European wheat shortage of 102,000,000 bushels and calling attention to the fact that the exporting countries have shortages and the importing countries have excesses over the crops of last year, he concludes: "Most of

the grain-merchants at Odessa are either Germans or Austrians, and, there being immense reserves of wheat in the interior granaries of Russia, which these merchants own, it is to their interest to exaggerate damage. Furthermore, the exportable surplus in Russia is so vast that a shortage under last year of even 100,000,000 bushels would not be disastrous nor prevent the Russians from having plenty to sell." Wonder if that Chicago man's name is "B-E-A-R"?

IN the light of facts it is impossible to believe that the figures of the wheat crop of 1888, officially published and generally accepted, were correct. The crop was set down at 415,000,000 measured bushels, which, owing to the alleged inferior quality of the grain, were equal to only 391,000,000 bushels. Allowing $5\frac{1}{2}$ bushels per capita for consumption, that would call for 341,000,000 bushels. Adding the 80,000,000 bushels exported, there is a call for 421,000,000 bushels. Adding the seed and other requirements, and it will be seen that all the factors, including the visible supply on hand when the new crop began to come into the market, call for at least 460,000,000 bushels. It was alleged that the mills of the Northwest would be compelled to shut down for want of wheat before the new crop was in. They did not shut down. In fact, they were not even compelled to restrict output for want of wheat. They had no difficulty in finding wheat enough to make all the flour they could find a market for. It might be worth the effort on the part of the government statisticians to discover somewhere nearly how much more than 391,000,000 weighed or 415,000,000 measured bushels of wheat constituted the actual crop of 1888.

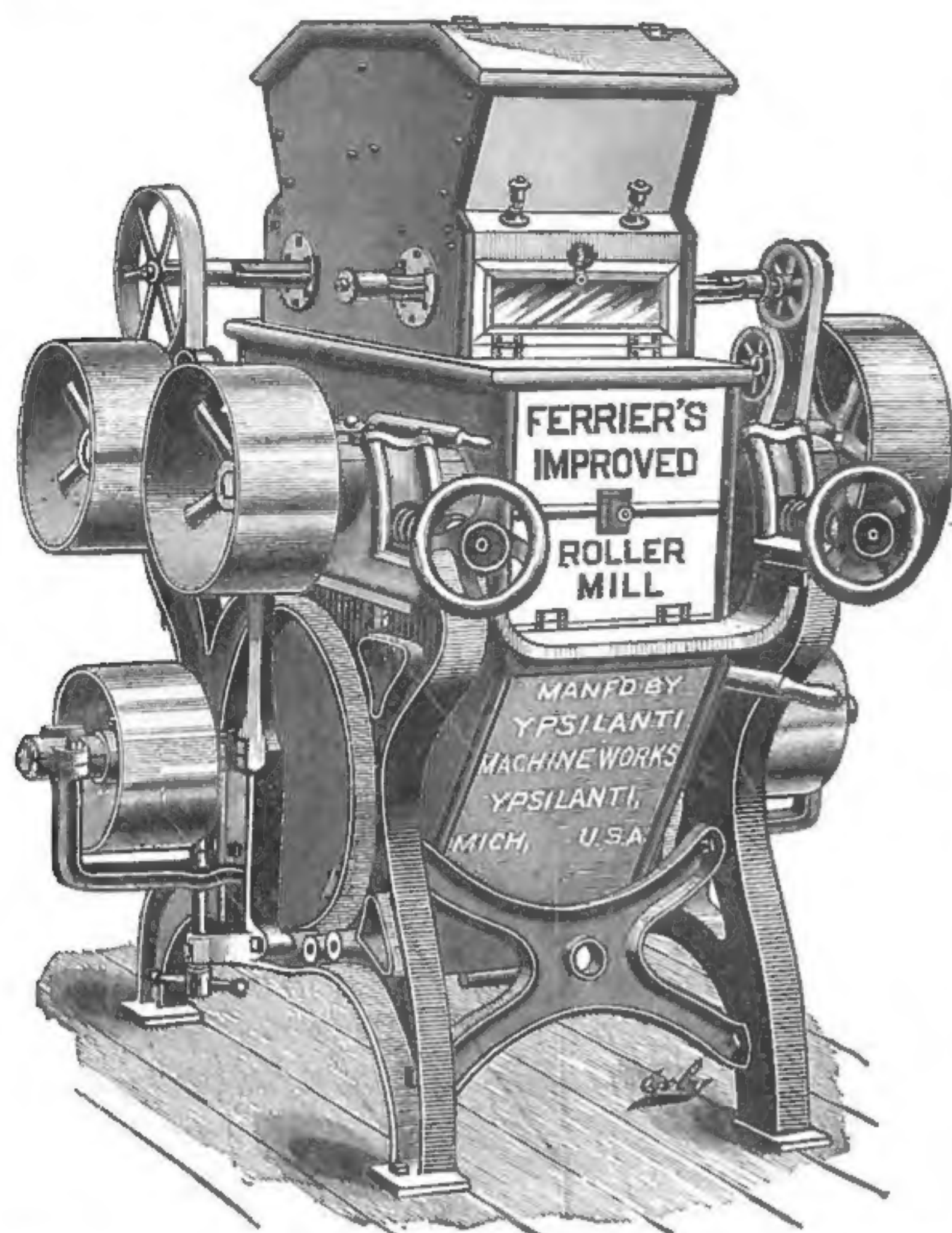
AMERICAN corn and corn products are not shown at the Paris Exposition. In another column is a letter from Charles J. Murphy, the originator of the proposal to make a great display in this line at Paris, telling of the failure of the project. It is plain that this failure means a good deal to our corn growers and millers. A display in Paris, such as was planned by Mr. Murphy, would have attracted the attention of the many millions of visitors, and its effect would have been at once visible in an increased demand for American corn, or maize, products suitable for human food. The corn-dealers and corn-millers ought to have felt like raising the small sum of money needed to give them a world-wide advertisement. To bring to the direct attention of European economists the great value of corn as food would mean a great increase in the foreign market for corn, and every dollar spent by our corn growers and millers in this advertising scheme would have brought back to them a thousand dollars in a short time. A great opportunity has gone unimproved. Another chance so good will probably never be presented. Hindsight is better than foresight, of course, and there is no gain in crying over spilled milk. New York promises a big World's Fair in 1892, and many Europeans and other foreigners will visit the United States then. Then an opportunity will again be given to place corn foods before the world, and only stupidity can allow or cause it to pass unimproved. It will not be so good an opportunity as Paris offered, but it will be worth improving. Will it be improved?

YPSILANTI MACHINE WORKS, YPSILANTI, MICH.

MILL BUILDERS

And Manufacturers of

FLOUR MILL MACHINERY



Sizes of Ferrier's Improved Four-Roller Mills.

8x15	6x15	6x20
9x15	9x15	9x24

NASHVILLE, TENN., MAY 3, 1889.

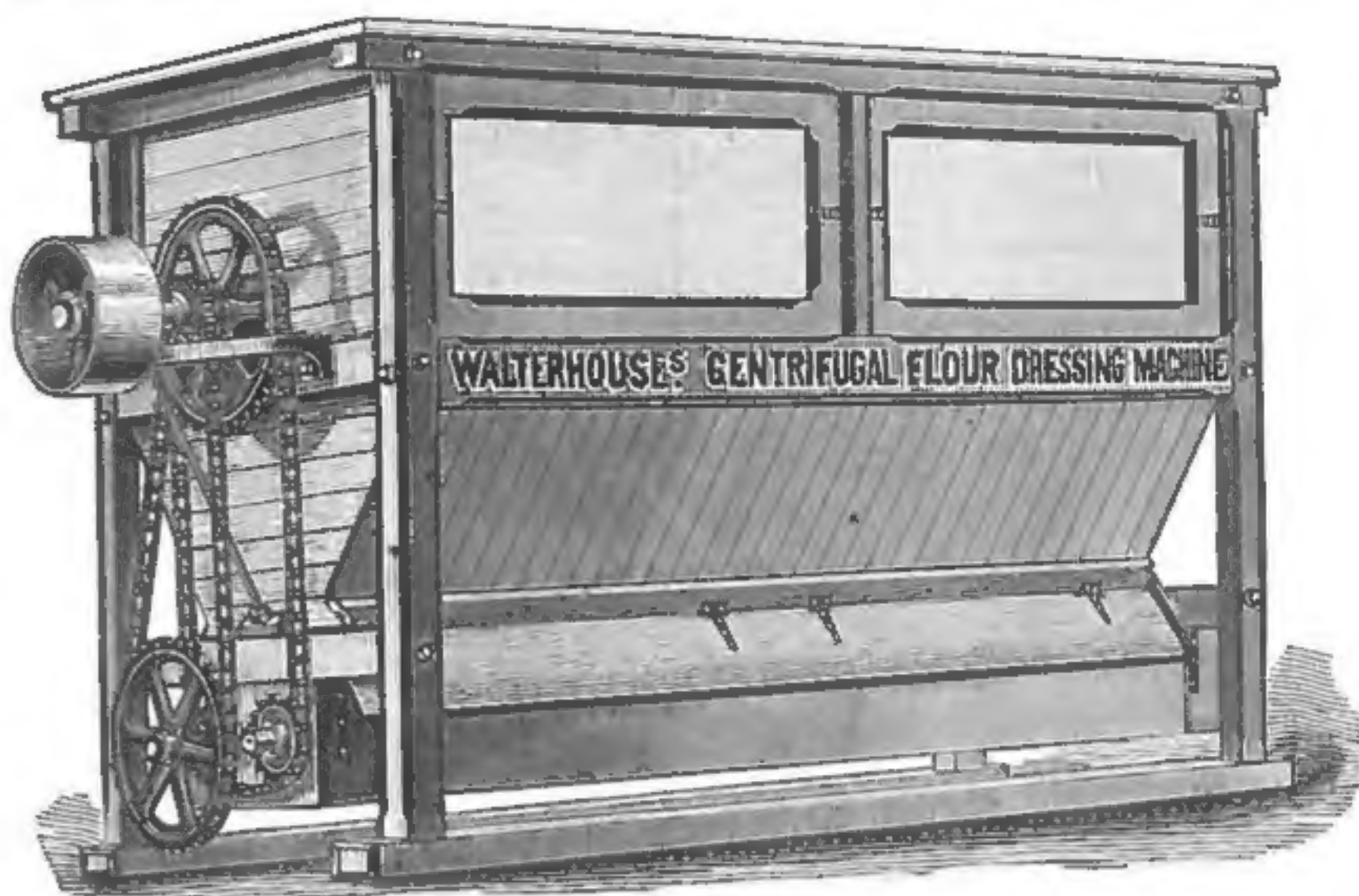
YPSILANTI MACHINE WORKS, YPSILANTI, MICH.

Gentlemen: We have had a line of your "Roller Mills" in use for over two years, and they have given entire satisfaction in every respect. They work like a charm, and their ease of adjustment and solid structure, together with the excellent finish you give them, can but recommend your machines to the milling public.

Yours respectfully,

A. R. DICKINSON & CO.

Dealers in Bolting Cloth. Walterhouse's Centrifugal; Walterhouse's Slow-Running Flour Dresser with Inside Cylinder; Plain Round Reels; Scalpers; Bolting Screens, Etc., Etc., Etc.



JOHN ORFF, PROPRIETOR OF
EMPIRE FLOURING MILLS.
FORT WAYNE, IND., APRIL 10, 1889.

YPSILANTI MACHINE WORKS, YPSILANTI, MICH.

Gentlemen: The Centrifugal Reel bought from you some time ago is doing its work complete in every respect. It does a large amount of work, and does it well. Should we make further changes in bolting, shall use more of them. Wishing you success, we remain,

Respectfully,

JOHN ORFF.

OFFICE OF LEXINGTON MILL CO.,
LEXINGTON, MICH., JAN. 23, 1889.

TO YPSILANTI MACHINE WORKS.

Gents: In reply to yours of June 5th, would say that we are well pleased with our mill. It has more than met our expectations. Although it was feared that the six-inch rolls would not prove a success, we find them to be complete in every respect. We are making as fine a flour as there is made in the state, and we guarantee our patent to be equal to Minnesota Patent. The mill has given us no trouble whatever since we started it, and for plan and workmanship, your Mr. G. Walterhouse deserves great credit. If your friends doubt it would be pleased to have them come and see for themselves.

Yours respectfully,

LEXINGTON MILL CO.

Dawson's Roller Mill

Is acknowledged to be the very best in the market. It has our Patent Automatic Centrifugal feeder, never failing to feed the stock the full length of rolls in an even sheet. It is the Latest and Best feed out, uses less power and is simple in construction. It can be placed on any style of machine with little expense. We use for roll bearings phosphor-bronze metal which will admit rolls being run at any speed without heating and with little friction, and uses little oil. We use the Dawson Corrugation, which is admitted the best in long or short system mills as the action is granulating rather than CUTTING.

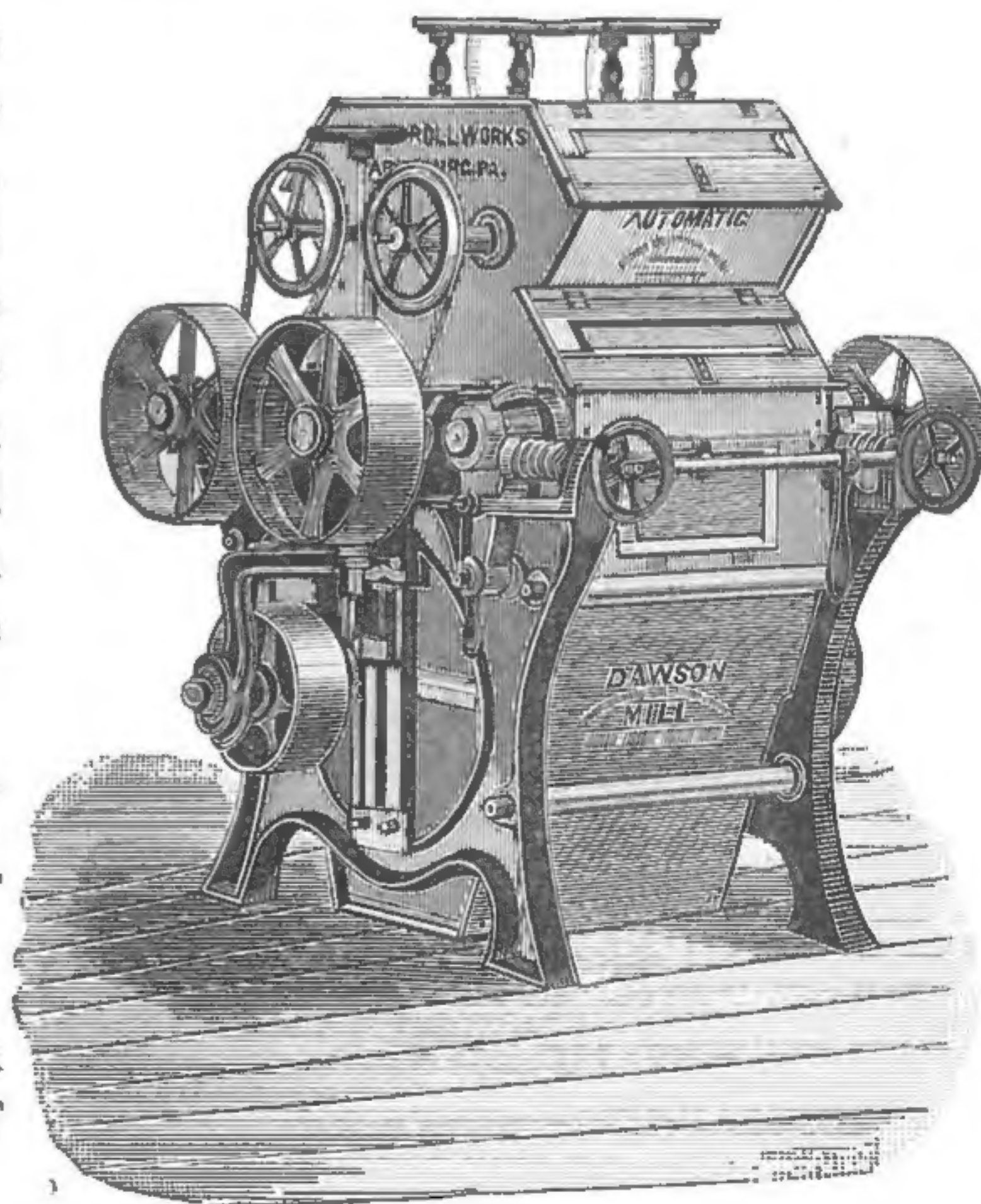
We have a large plant to Re-grind and Re-Corrugate Rolls.

Owing to our late increased facilities and central location we are enabled to ship goods promptly on the shortest notice.

PARTIES CONTEMPLATING REMODELING THEIR MILLS OR BUYING ANY ROLLER MACHINES ARE REQUESTED TO PUT THEMSELVES IN CORRESPONDENCE WITH US.

FOR PRICE LISTS AND CIRCULARS, ADDRESS,

Dawson Roll Works, Harrisburg, Pa.





PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,
Over Bank of Attica.
McFAUL & NOLAN, - - - PROPRIETORS.
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application.

Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisements taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

WANTED.

A situation with parties who appreciate good work, with rolls or buhrs on patents. Have the following recommendation from Miller Bros., Forest Grove, Ore., dated Nov. 10, 1887: "To whom it may concern: This is to certify that Peter Provost has been in our employ as head miller, and has given entire satisfaction. We believe him to be a very competent man, and cheerfully recommend him to the milling public." State wages you wish to pay. Address, PETER PROVOST, Menominee, Mich. 21

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office, 10 cents must be added to pay postage.

WANTED.

A miller with some capital to help stock with, to take charge and run my mill. Address LOCK BOX 265, Clearfield, Clearfield county, Pa 1720

FOR SALE.

Flour-mill, corn-mill and cotton-gin, in a new growing country, splendid for wheat. Good opening for a mill-man who understands the business. For particulars apply to W. J. MILLER & CO., Ballinger, Texas. 2021

FOR SALE.

Several good second-hand and new turbines of various styles. Second-hand price list and descriptive matter and prices of our new machines sent free. Every one interested in the shortest route to successful milling on rolls or in grinding corn and feed with the least expense of power, should address us before buying.

FLENNIKEN TURBINE CO.,
Dubuque, Iowa.

8tf

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

M-I-L-L-E-R-S

Wanting Bolting Cloths should write for discounts on same before purchasing elsewhere to

SAMUEL CAREY,
71 Broadway, New York,

WANTED.

A good buhr miller, that thoroughly understands his business, to run a custom mill. Must be a sober, industrious man. State age, how long at the business, whether married or not, and best terms for steady employment. Give references. Address BEACH, BROWN & CO., Montrose, Pa. 2223

MOVEMENTS of new wheat from the West are growing large. No American mill will have to shut down this year for want of wheat to grind.

AFTER all the "blue ruin" by drouth, frost, wind and flood in the Northwest, it is somewhat startling to read that in Dakota and Minnesota wheat is yielding all the way up to 40 bushels to the acre, and the quality is high. At Grand Forks the average is 22 bushels to the acre, the range reaching 40 and over. In Walsh county, where particular "ruin" was wrought, the yield runs from 25 to 35 bushels to the acre. With Dakota and Minnesota yielding nearly 100,000,000 bushels of wheat on a "ruined crop," we can not help wondering what would be the total of those two sections in case a favorable season should fall on them.

AMERICAN free-trade writers and orators are never weary of descanting on their own doctrine that protection by tariff encourages the formation of trusts and causes all sorts of labor troubles. They must be made extremely weary to read, in this hot season, the announcement made in British journals, day after day, that there is not in all Great Britain a single industrial interest of any magnitude that has not been "trusted" or "syndicated," and that in London alone over 250,000 laborers are out on strike. As Great Britain is the model free-trade country, what will the American monomaniacs say of the situation there? These monomaniacs claim that "free trade has made London the metropolis of the world." Doubtless, and quite as doubtless, with its pauper population of about 800,000 to-day, and with its workers averaging from 20 to 50 cents a day the year through, free trade has made London the chief center of human misery and degradation on earth. London's "quantity" is a fatal test for free trade, as it suggests London's "quality." The less said about that magnificent city as an example, the better for the free-traders.

SINGULARLY enough, the enormous crop of wheat in the United States this season is coupled with an exceedingly short crop of milling poetry. We do not wish to appear over-informed concerning the shortage, but from all accounts, based on reports covering a wide territory, gathered by intelligent and industrious statisticians and experts, we consider the shortage in old-mill, mill-dam, flour-dust, wheat-field, cornstalk, mill-race, buhr-stone, dusty-miller and incipient hoe-cake poetry, of the gush-mush-slush stripe, to be quite 95 per cent. This amounts to a "disastrous failure," as Prime would put it, and we hardly know what effect so serious a falling-off will have on "Whang," "Bang," "Clang" and the other milling poets. Coupled with the wheat shortages in the Argentine Republic, India and Austria-Hungary, the shortage in mill-damaged poetry must work a regular revolution in the grain and flour markets during the next few months. Most of the small visible supply of milling poetry is not up to snuff in quality. Portions of it show badly. It is wrinkled, weevil-eaten, stink-smutted, bunted, lacks plumpness and strength, is generally thin, does not dough well, and flattens out dreadfully in the oven. In value it is far below the average, having sunk from \$000,000,000 per thousand reams to \$000 in less than three months. Cynical consumers are not slow to say that even at \$000 per thousand reams the price is far more than it ought to be for such stuff. We understand that, owing to the small visible supply, the perfect depletion of the market and the probable largely increased demand likely to be made as soon as the disaster of the present failure is fully known, the milling-poetry producers are preparing to sow a largely increased ache-rage to this crop. All the conditions point to a retrieval of the present disaster. We shall be deliriously delighted to chronicle a shortage of just 100 per cent. in the next crop of mill-dam poetry.

POINTS IN MILLING.

THE short-system movement appears to have gained a hold in France. The French millers are exploiting a system known as the "Hignette" short system of milling. It is "short" with a vengeance, as the inventor, Mr. J. Hignette, claims to be able to smash down wheat by one reduction on his "disintegrator" and by his patented system of dressing the smashed product recover all the flour easily and perfectly. This "Hignette" system will scarcely prove to be as acceptable as the Abernathy short system, now successfully employed in this country.

MR. HIGNETTE sums up the advantages of his system as follows: 1. Less motive power than is required by any other system. 2. A larger yield and better quality of fine flour. Bakers are reported to be unanimous in praising the large yields in bread given by these flours. 3. The peculiar action of the machine, which is neither pulverizing nor cutting, but is simply percussive and has the effect of detaching the bran entire from the floury particles and of giving a white flour free from specks. 4. The germ, not being scarified by the action of this centrifugal disintegrator, can also be eliminated with the bran. 5. The working staff of a mill is reduced to a minimum. 6. The wear of the machine is inappreciable. 7. The floor-space is only half that required in other systems of milling. 8. Buhrs are entirely dispensed with.

WHAT machinery does this French short system require? For a mill grinding about 120 barrels in 24 hours he names the following equipment: 1. A 4-roller mill, two rolls being left smooth to act as laminators and two rolls being grooved to detach the bran. 2. A "Hignette" centrifugal disintegrator for wheat. 3. A "Hignette" centrifugal disintegrator for middlings. 4. A mill with three or four smooth rolls for finishing the middlings. The purification is effected by two "Hignette" purifiers, one being used for coarse and the other for fine middlings. The separation of the bran and the dressing are carried out by eight ordinary bolters and is finished by a double centrifugal dresser. A couple of "pastrys" complete the plant.

THE making of flour on the Hignette process and by the "Hignette" machines is briefly described as follows: The cleaned wheat is received by a bin on the second floor, from which it is shot into a hopper placed at the head of the splitting cylinders. From these cylinders the berries are passed into a small bolter, which eliminates a certain amount of waste products, which simply fall into sacks, while the split berries as they quit the bolter are taken to the centrifugal disintegrator, passing on the way over a magnetic incline, which arrests the iron particles that might get into the disintegrator. The products of this machine are fed into a bolter, which serves to separate the coarse bran, and this bran is taken to the bran-detacher, which flattens it out and strips off any middlings that may still adhere; the product of this machine is taken to a bran-dresser, which separates the middlings ready for the purifier, and if it be advisable to grade the bran, it is finally treated in a grading cylinder. After its final separation from the coarse bran the meal is fed into a dressing-machine, which takes out 15 per cent. of fine flour, while the tailings go to a dresser, which yields 2 per cent. of flour and fine middlings. This fine and second flour, which is remarkably white, will be about 17 per cent. of the weight of the wheat, but this will vary according to the kind of grain. The fine soft middlings from the purifiers are treated by the "Hignette" disintegrator, while the hard middlings are treated by the smooth roller-mill, and the milling is finished by several operations in the two disintegrators. The products of the roller-mill pass into the centrifugal, while those of the disintegrator are dressed in the ordinary bolters. The flour that results is taken to the "pastrys," whence it is drawn off in sacks to form the "farine flour," or mixture of all the qualities of flour.

AMERICAN flour-makers will hardly fall in love with this

French short system and apparatus. Some of its main features have been tried in all countries in which milling has gone through evolutionary processes, and it is safe to predict that the "Hignette" contraption will find it as difficult to make progress as the Haggemacher "plansichter" finds.

THIS is a late day for "entire revolutions in milling." Those who believe in such revolutions should bear in mind that there are certain limitations in every line of work which can not be overlooked. In the conversion of wheat grain into flour those limitations are soon reached. The one insurmountable barrier to all attempts to make flour instantaneously is the close relation between the bran and the flour. When the sudden smashing makes flour, it also makes bran. Then comes the difficulty. If the smashing be severe enough to reduce all the floury portion of the berry into flour, it will also be severe enough to reduce all the bran and coating impurities to the same degree of fineness. Then there is a hopeless mixture. Complete separation is impossible. The product is not flour. It is not white enough, nor rich enough, for flour. It is not bran. It is too white and too rich for bran. The miller can not sell it for flour, at flour prices. He can sell it for bran, at bran prices, but that he can not afford to do. He is in a fix.

It would seem that the ambitious "revolution" makers, instead of starting in with an impossibility like that, should direct their efforts in the way of devising some method of removing the bran and other non-floury portions before the final smash is made. Just so long as they keep on sending the flour and the bran together into fine dust, just so long will they dream vainly of a "revolution." The idea of grading, reducing gradually, and separating and purifying as now practiced is correct. The idea of dispensing with the indispensable, whether it take the form of crazy one-smash milling, or pneumatic grinding, or cyclone pulverizing, or any other equally impracticable process, is pure crankism. The miller who holds such ideas is a hopeless case.

FRANK FREE TRADE ADMISSIONS.

Judging from many recent indications, the British free-trade advocates in the United States think that there is no longer any need of concealment of their plans, aims or instrumentalities in proselyting and propagandizing. The Minneapolis, Minn., "Tribune" recently published a remarkable interview with "one of the many active American members of the Cobden Club," who is "devoting his time, and proposes to until the next Presidential election, in disseminating tracts and various publications on free-trade and soliciting additions to the club in this country." Regarding the mode of proselytism employed by himself and his confederates he said quite frankly: "It isn't their method of procedure to herald their business when entering a new field. First they locate at the best hotels, where men of wealth and leisure congregate. By ingratiating themselves as men generally can who are traveling for pleasure and broader information, they by degrees ascertain where they can make an impression. Of course, none but the influential and wealthy classes are courted."

But the efforts of these Cobden Club emissaries are not confined to simple propagandism; they are confessedly extended to active measures of direct persecution and hunting down brought to bear against particular champions of the protective system, whose talents or position foreshadow serious damage to the free-trade movement. On this point the man interviewed said: "Prior to 1876 there were but 20 members of the Cobden Club in the United States. When it became apparent that Mr. Blaine, the chief of the protectionists, was growing in popularity and likely to become a formidable candidate for President of the United States, our folks commenced earnest work and used large sums of money to defeat his aspirations by circulating not only free-trade documents, but hunting up and publishing his record, or so much of it as could be made obnoxious to the people. We did every thing in our power to prejudice and poison the public against him without having it known what agency

was doing it. Even the Mulligan letters business was largely instigated and aided by our club." If such extreme animosity pursued Mr. Blaine, the same fierce and merciless and unscrupulous antagonism may be expected to assail President Harrison, who has manifested a resolute purpose to set the protective principle in victorious array, and whose political position and power are equal to the task.

The rapid and formidable enlargement which, in recent years, has been accomplished in the American membership of the Cobden Club is stated in the following terms: "Up to the hour of the meeting of the Republican convention at Cincinnati in 1876, the total American membership of the Cobden Club was but 33. During the first two years of Cleveland's administration 27 prominent Americans became members, among them three United States consuls: Elbridge Gerry, at Havre, France; E. F. Hale, at Manchester, England; Jacob Schoenhoff, Tunstall district, Staffordshire, England, and three professors, James McKenna, of Troy, N. Y., F. W. Tausig, of Harvard University, and A. B. Woodford, of Indiana. All told, we have to-day working in the schools, colleges and higher institutions of learning in this country 28 professors, and it is in this direction, by educating the abler young men, that we anticipate immense additional strength to our campaign work of 1892."

American manufacturers in every line, flour-makers, iron-workers, wood-workers, textile fabric makers, mechanics, farmers and all others engaged in work and interested in the question of wages, labor conditions and national development, should keep their eyes open to the meaning of the presence and the work of the paid agents of foreign interests among us. The election of 1888 is thought to have settled, for a time at least, the question of fiscal policy in the United States, but it did not squelch the foreign longing for free admission to the magnificent markets of the United States. Free trade fell and protection triumphed in that battle, but the foreign and unpatriotic elements have not given up the contest. They are pushing their professors into un-American institutions, like Yale College, Harvard University and other schools, in which American youth are taught that the American experiment of self-government is a failure and that American ideas of fiscal policies are fallacious. They secure fat places for their writers on un-American papers, like the New York "Times," the New York "Herald," the New York "Evening Post," the New York "World," the New York "Commercial Bulletin" and others in other cities, where they systematically and incessantly decry all American institutions, including the tariff system. All this propagandism costs money, great sums of money. Who supplies the funds for this expensive warfare on American industries and institutions? The Cobden Free Trade Club, that curious organization of deeply interested, greedy, avaricious foreign manufacturers and their curiously unpatriotic, fanatic, venal American tools. American workers should understand clearly the situation in all its bearings. They should conclude that, if the American markets are worth all this determined effort on the part of foreign producers, surely they are worth preservation to American producers.

CORN FOODS NOT UNDERSTOOD.

Says a cotemporary: For many purposes of the culinary art the process of reducing corn-meal is not carried far enough. The meal is left too coarse, and it must either be placed on the table half-cooked or cooked so long that many of its properties are changed. It is rare that corn-meal is passed through a number 64 wire cloth, and yet such bolting will leave the product in grains, each containing many hundred starch cells. Several years ago it was considered the thing to have wheat flour "sharp," and the "fad" was carried to such an extent that patent flour was often only very fine middlings. Its bread product was harsh and dry, tasteless and without tenacity after it had been baked a few hours. The cause for this was that the particles were too large to be readily acted upon by the ferment, and instead of a partial change of the starch into sugar, the most of it was in the bread in the form of starch, lacking sweetness

and altogether unsatisfactory except to the baker, for it would absorb water greatly and still be dry as a bone, because the starch cells, which may number two or three hundred in the center of a single grain of "sharp" flour, would not receive the action from the water or ferment. The central cells would absorb the surplus water from the outside cells, leaving the loaf dry and harsh, and would not receive any action from the ferment that changed the starch into sugar, and hence the bread lacked sweetness. It does not destroy the force of this to assert that corn-flour would lack the property of raising because of a nearly entire absence of glutinous properties. For culinary purposes corn would never usurp wheat, but many new and popular uses would be developed. Glutinous properties could be given by mixing with wheaten flour.

MILLING PATENTS.

Among the patents granted August 27, 1889, are the following:

Isaac E. Baker, Red Wing, Minn., No. 409,658, an attachment for dust-collectors.

Chas. H. Cooley, Hartford, Conn., No. 409,669, a regulator for grain-scales.

Henry Pooley and John Parkinson, Liverpool, County of Lancaster, England, No. 409,702, a grain-weighing machine.

Robert Strain, jr., New York, N. Y., No. 409,808, an automatic grain or oil weighing apparatus.

Thos. Roberts, Springfield, Ohio, No. 409,869, a crusher for grinding-mills.

Arthur A. Bourgeois, Ariel, La., No. 409,905, a rice-hulling machine.

Jas. J. Phillips, Norfolk, Va., No. 410,017, apparatus for drying nuts and grain, and No. 410,018, means for cleaning and drying nuts and grain.

John Murray Case, Columbus, O., No. 410,069, a grain-scourer, assigned to the Case Mfg. Co., same place, and No. 410,070, the same, similarly assigned.

Jos. F. Gent, Columbus, Ind., No. 410,085, a drying apparatus.

Francis H. Richards, Hartford, Conn., No. 410,116, a regulator for grain-scales, and No. 410,117, the same.

Chas. H. Cooley, Hartford, Conn., No. 410,138, a regulator for grain-scales.

NO AMERICAN CORN AT PARIS.

American corn, or maize, is not represented at the Paris Exposition, as it should be, and as it was expected to be. Charles J. Murphy, who proposed last winter to build a corn-palace at the exposition and to display all the varied corn products, tells in the following letter to a New York friend why the project failed. He writes:

"Ever since the Paris Exposition of 1878, when the United States made a very poor agricultural showing, I have waited for an opportune time to exemplify to the world what could be done with our Indian corn as a human food. I concluded the time had come for this display at the Paris Exposition. I laid my plans before the New York Produce Exchange, the President of which appointed a committee, with ex-Mayor Franklin Edson as chairman, to further my project. I then went West and made strong appeals to the produce exchanges of the corn States to help the movement with subscriptions. Circulars were also sent by the New York committee to eighteen of these commercial bodies, including Baltimore and New Orleans, urging assistance. The principal produce exchanges and boards of trade in the West appointed committees to solicit subscriptions, and the only money raised was \$360 at Buffalo, which was afterward returned. New York City subscribed \$1,050. Congressman Townshend, of Illinois, introduced a bill in Congress proposing to grant a special appropriation, but Congress adjourned without action. Similar bills were introduced in the Legislatures of Ohio and Illinois, but they too failed of passage. I then came to Paris in hope that Gen. Franklin, the United States Commissioner, would at least erect the building at a cost of \$2,500 out of the \$250,000 appropriated by Congress; but he refused to give one dollar for this ex-

hibit, which would have been of more practical value to the farming interests of the United States than all the other American exhibits (such as they are) combined. The French authorities generously gave the site without charge, which they valued at \$12,000. It is to be regretted that a movement should fail which, if successful, to use the words of the United States Commissioner of Agriculture, would enhance the value of every acre of land in the corn belt."

A SMALL ALLFREE SHORT-SYSTEM MILL.

Herewith is presented an engraving representing the highly successful and satisfactory small short-system mill made and planned by the J. B. Allfree Company, of Indianapolis, Ind. The plan shows a 25 or 30 barrel mill. The outfit includes a separator and wheat cleaner, one 7 by 15 4-roller mill corrugated, one 7 by 18 4-roller mill smooth, two No. 2 "Success" bolters, one No. 1 "Climax" bran-duster, one 2-break scalper, one No. 2 centrifugal reel, one stand of elevators 14 by 4½, 6 stands of elevators 14 by 3½, one bin for wheat and one flour-exchange chest. The system is guaranteed to make No. 1 flour, and the entire outfit may be put up in a building only 25 by 30 feet. Address the company for full particulars.

—O—
ACCORDING to the official statement of the organ of the Knights of Labor organization, the membership of that body, once more than a million, has dwindled to 215,000. That figure is claimed as the present membership, but there are those in the body who assert that the active members do not at present number 100,000. Notwithstanding the wreck of the order, by unwise participation in politics, by the waging of hopeless and senseless warfare in the name of labor, and by general bad management, the officials go on planning mighty federations of laboring men and dreaming and boasting of a great triumph over every thing and every body in the near future. The balance between the good and the bad wrought for labor in the aggregate by this particular organization can not be said to be on the side of good. As a reforming society it has been a conspicuous example of how not to do it and of what it is best not to be.

WHY BREAD CRUMBLES IN CUTTING.

Concerning the crumbling of bread in cutting a writer in "The British Baker, Confectioner and Purveyor" says: The chief cause of this complaint is undoubtedly insufficient baking. If we do not give a joint of meat quite long enough in the oven to cause the gravy to run out, we know that the meat has the appearance of being more underdone than it really is, and to some people is very objectionable; so also is it in the case of bread; if for the sake of saving half an ounce on the loaf we draw the batch before it is properly

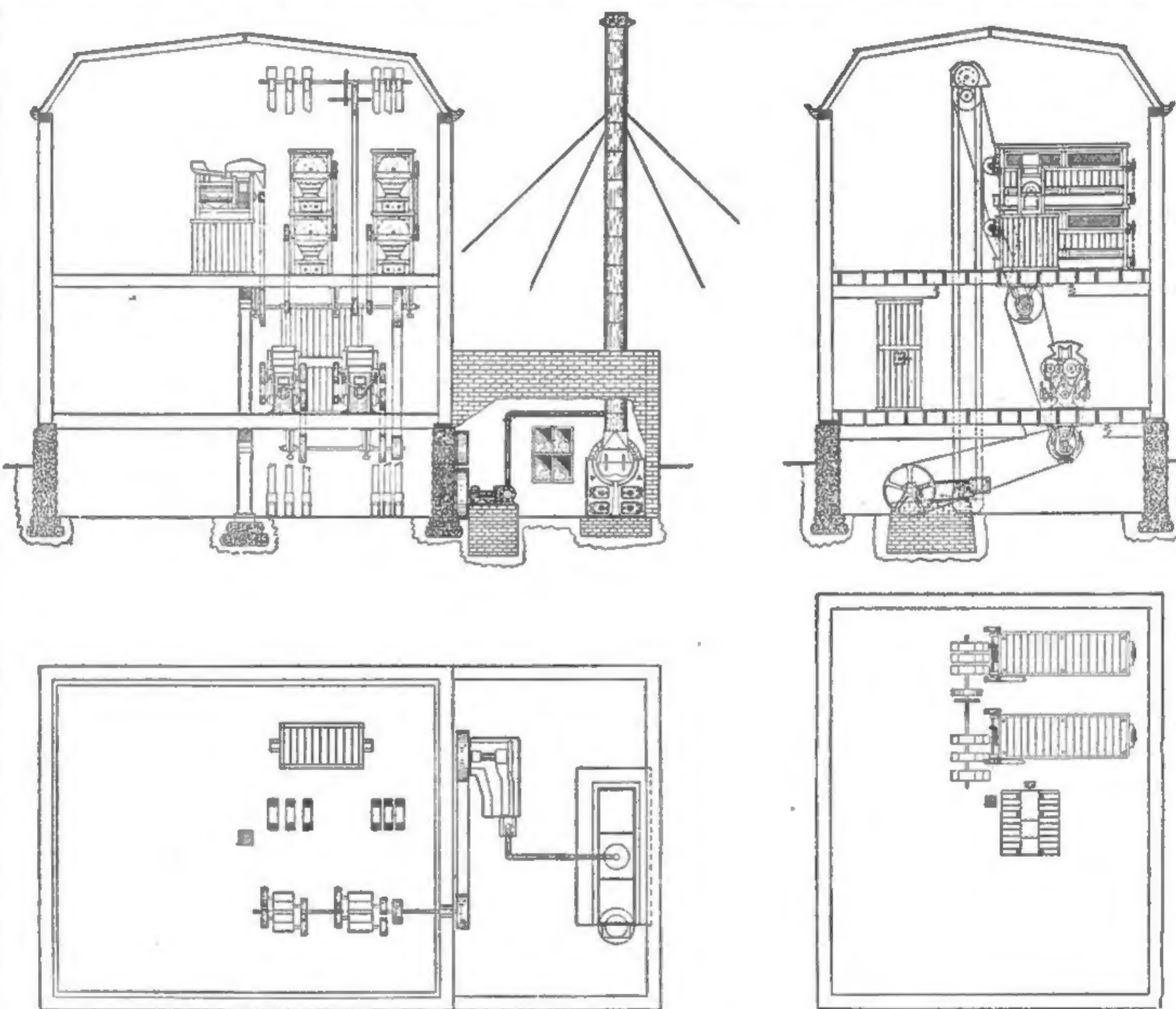
soaked, that is, "with the gravy in it," we must expect the loaf to suffer in appearance and cutting in a greater proportion than it has saved in weight. Another very frequent cause of a crumbling loaf is too much proof. This excess in proof is most often likely to occur when we are moulding up. It may be a hot day, thus causing the dough to come along quicker and the workers to be less energetic; or the excess in proof may arise by our letting it stand on the boards for a little extra time before setting in the oven, for the purpose of obtaining extra bulk in the loaf. Although excessive proof will give us crumbling bread, we by no means find that by shortening our process of fermentation we overcome any risk of its occurrence. In fact, it is just the reverse, as we find that by employing the three stages of fermentation, ferment, sponge and dough, provided that the ferment does not work too freely, we obtain a firmer and closer loaf, therefore a better cutting one, than if we restrict ourselves to the shorter process of merely sponge and dough. If, however, the ferment or sponge has worked too freely by reason of having been taken up too warm or stood in too warm a place, or what not, the results in the loaf will be

greatly improved by adding a little additional salt in the dough; extra salt, all things being equal, will always cause the loaf to be stronger in its tissues, therefore less crumbly. Besides the extra salt, extra baking will also have the effect of healing the mischief, the same as under-baking has the effect of causing it. A very tight dough, unless the flour be very weak, will be found instrumental in producing a

close and firm crumb. We notice the effect that consistency of dough has by the case of tin bread versus cottage. The former, being made from a different and weaker dough, is always coarser or more porous; or where, as in some bake-houses, the same dough is employed for the tins, it is always scaled off first, covered up and set in last, thereby obtaining more proof, and being an instance of additional proof tending towards coarser and, in excess, crumbling bread, such as is in the tin variety more often experienced than with any other. On the same basis as a free ferment or a free sponge gives us crumbling bread, so also will an excess of yeast, or new (sometimes warm) or inferior flour add to our troubles.

COTEMPORARY COMMENT.

The crop-killing fool is not worth a premium over other fools anywhere else but in the United States, and he and the manipulator of \$2 wheat and \$10 flour ought to be ground between the upper and nether millstones. A fine crop of good quality is a blessing; from the time it is garnered it is on the move, and the better the quality the more defiant it



THE ALLFREE 25 TO 30 BARREL SHORT-SYSTEM MILL.

is of manipulation, and the less temptation there is to mix it down and stretch minimums for ulterior motives. The American custom is to feed it to chinch-bugs and Hessian flies, wash the bloom off of it, sweat it in the shock, heat it in the bin, decry its grading and condition in elevator, cut it with weevil, and then after all this is done, in the interest of some specially high standard market, to expect a foreign buyer to pay more for it than for other sorts not nearly so well (or ill) advertised.—*Baltimore "Journal of Commerce."*

Now that wheat cutting is about over and threshing has begun in the north, the yield is exceeding expectations as greatly as it did in the south. There are patches of country in the north that were ripped open by spring winds, and the prospect of a crop destroyed there, but such large sections as escaped are yielding heavy crops.—*Minneapolis "Market Record."*

The charge is made that the Vienna Seed Conference is made up of grain-owners, and that therefore the estimates and conclusions reached are valueless on account of their presumably partisan coloring. If the delegates to this conference had been professional men, fiddlers, peanut peddlers or ship captains, the estimates would have been of some account, but being made by men in the grain trade they are, of course, not entitled to the slightest consideration.—*Chicago "Daily Business."*

WINNIE, WILLIE, WALTER, WEATHER.

"Warm weather, Walter! Welcome warm weather! We were wishing winter would wane, weren't we?" "We were well wearied with waiting," whispered Walter, wearily. Wan, white, woe-begone was Walter, wayward, willful, worn with weakness, wasted, waxing weaker whenever winter's wild, withering winds were wailing. Wholly without waywardness was Winifred, Walter's wise, womanly watcher, who, with winsome, wooing way, was well-beloved. "We won't wait, Walter; while weather's warm, we'll wander where woodlands wave, won't we?" Walter's wonted wretchedness wholly waned. "Why, Winnie, we'll walk where we went when we were with Willie; we'll weave wildflower wreaths, watch woodmen working, woodlice, worms wriggling, windmills whirling, watermills wheeling; we will win wild whortleberries, witness wheat winnowed." Wisbeach woods were wild with wild-flowers; warm westerly winds whispered where willows were waving; wood-pigeons, wrens, woodpeckers were warbling wild wood-notes. Where Wisbeach watermill's waters, which were wholly waveless, widened, were water-lilies waxen white. Winifred wove wreaths with woodbine, whitehorn, wall-flowers, while Walter whittled wooden wedges with willow wands. Wholly without warning, wild wet winds woke within Wisbeach woods, whistling where Winifred wandered with Walter; weeping-willows were wailing weirdly, waging war with wind-tossed waters. Winifred's wary watchfulness waked. "Walter, we won't wait." "Which way, Winnie?" Winifred wavered. "Why, where were we wandering? Wisbeach woods widen whichever way we walk; where's Wisbeach white wicket; where's Winston's water-mill?" Wistfully Walter witnessed Winifred's wonder. "Winnie, Winnie, were wrong, wholly wrong, wandering within wild ways. Wayfaring, weather-beaten waifs, well-nigh worn-out." Winifred waited where, within wattled woodwork walls, wagons, wheelbarrows, wains were waiting, weighty with withered wood. Walter, warmly wrapped with Winifred's well worn wadded waterproof, was wailing woefully, wholly wearied. Winnie, who, worn with watching, well-nigh weeping, was wistfully, wakefully, waiting Willie's well-known whistle, wholly wished Walter's well-being warranted. With well-timed wisdom, Walter was wound with wide, white worsted wrappers, which wonderfully well withstood winter's withering, whistling winds. Wholly without warm wrappers was Winifred, who, with womanly wisdom was watching Walter's welfare, warding Walter's weakness. When will Willie wend where we wait?" wearily wondered Walter. "Whist, Walter," whispered Winnie, "who was whooping?" "Whereabouts?" Welcome whistling was waking Wisbeach woods when winter's windy war-

fare waxed weaker. "Winnie! Walter!" Winifred's wakefulness was well-grounded. "We're well, Willie; we're where Winston's wagons wait." Without waiting, Willie was within Winston's woodwork walls. "Welcome, welcome, Willie;" Winnie was weeping with weariness with watching Walter, weak with wayfaring, "Why, Winnie! wise, watchful, warm-hearted Winnie," Willie whispered, wheedlingly, "we won't weep; Walter's well; what were Walter without Winnie?" Wholly wonderful was Winifred's well-timed, womanly wisdom, which well warranted weakly Walter's welfare. Whenever wandering within Wisbeach woods with Winnie, Walter would whisper, "What were Walter without Winnie? wise, watchful, warm-hearted Winnie!"

THE Vienna Seed Market, the annual gathering of Austria-Hungarian grain-dealers, was opened August 26. The principal officers of the government were in attendance. The presiding officer in his speech alluded to the agitation set on foot to abolish the annual meeting. He said the result was seen in the fact that only half the usual visitors were present. He dwelt on the serious competition of the Paris seed market. Official reports were then read to show that in Austria-Hungary the crops were the most unfavorable for the last ten years. The total yield of Hungarian wheat is only 111,000,000 bushels, being 28 per cent. below the ordinary medium harvest. Rye yielded 45,000,000 bushels, or 41 per cent. below the medium; barley 47,000,000 bushels, a deficiency of 47 per cent; oats 57,000,000 bushels, a deficiency of 44 per cent. In Austria wheat yielded 47,000,000 bushels, a deficiency of 17 per cent; rye 78,000,000 bushels, a deficiency of 14 per cent; barley 52,000,000 bushels, a deficiency of 21 per cent; and oats 107,000,000 bushels, a deficiency of 14 per cent. Austria-Hungary will hardly be able to export any cereals this year.

THE London "Mark Lane Express" of September 2 says: The sunshine has returned and has benefited the northern and western sections somewhat. Elsewhere the benefit has been trivial. The wheat crop of Great Britain is reckoned at 30 bushels per acre. The yield in Ireland is estimated at 2,000,000 bushels, making a total of 75,487,670 bushels. Samples of good wheat are rare. The values of old are steady. The sales of English wheat during the past week were 26,842 quarters at 31s 2d, against 19,763 quarters at 36s 4d during the corresponding week last year. The trade in foreign wheat is quiet and prices have declined 6d. The certainty that a failure of the Russian and Indian crops will be supplied possibly by large shipments from America makes buyers cautious. Flour is quiet. The strike causes stragglers in the foreign grain market. Oats are 3d dearer.

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STRAINS IN BENT PIPES.—Experiments recently made on the strength of bent pipes have shown that the strain on the inside of the angles is due to efforts of the pipes to straighten themselves under pressure. In one of the experiments referred to a copper pipe $6\frac{1}{2}$ inches bore, $\frac{3}{8}$ inch thick, was used. The angle was 90 degrees and the legs about 16 inches long from the center. At a pressure of 912 pounds to an inch the deflection of the pipe was nearly $\frac{1}{8}$ inch, showing an enormous strain on the inner side in addition to the pressure. A steam-engine indicator is made in England on this principle, in which a curved pipe is employed, and the tendency to straighten under pressure produces the recording movement.

GENERAL NOTES.

The following table shows the revenue of the United Kingdom of Great Britain and Ireland for the year ending June 30, 1889, compared with the preceding year:

	1889.	1888.
Customs.....	£19,973,000	£19,726,000
Excise.....	25,615,000	25,650,000
Stamps.....	13,470,000	13,300,000
Land tax.....	1,035,000	1,030,000
Home duty.....	1,930,000	1,925,000
Prop. and Income tax.....	12,380,000	13,975,000
Post Office.....	9,160,000	8,800,000
Telegraph service.....	2,125,000	1,965,000
Crown lands.....	430,000	410,000
Suez Canal.....	254,436	242,479
Miscellaneous.....	3,186,560	3,043,808
Total.....	£88,558,996	£90,067,287

THE BRAZILIAN BUGABOO COLLAPSES.

One by one the great bugaboos created to affright American flour-makers are collapsing. Even the Brazilian flour-mill bugaboo, built by British capitalists with the avowed intention to cut off entirely the exportation of flour from the United States to Brazil, is showing signs of collapsing. Consul-General Armstrong, representing the United States at Rio de Janeiro, Brazil, in a recent report to the department at Washington, says: "Some years ago there was established a flour-mill in this city. It has recently been enlarged, and another enterprise of this kind, belonging to an English company, with a capital of \$1,250,000, has been organized. The mill of this company has a capacity for grinding 216 tons of wheat a day. The owners of these mills import wheat from the United States, River Plate, Europe and Australasia. They are endeavoring to stimulate its culture in Brazil by the distribution of seed. At one time a large quantity of wheat was produced in the province

of Rio Grande do Sul, which in 1816 exported 226,981 bushels of this product. But in consequence of some disease in the Rio Grande wheat-culture was abandoned, and the mill at Pelotas imports the greater part of the wheat it grinds, though there is a small quantity produced in some of the colonies. In my last annual report I gave my reasons for thinking that the flour-mills in this country would not prove pecuniarily successful. Among those reasons was the belief that a commercial treaty would be negotiated between the United States and Brazil. This belief has been strengthened by the action of the Brazilian parliament, which, at its last session, authorized the government to make such a treaty. Indeed, Brazil is at the present time extremely anxious to secure in the United States a permanent and lucrative market for its sugar. Just as American statesmen see that the natural outlet for the surplus products of the United States is to be found in South and Central America, so do Brazilian statesmen regard the United States as the natural market for the coffee and sugar of Brazil. To secure this market they are willing, I am sure, to make liberal concessions."

British influence led Brazil into the project of cutting off the Brazilian nose to spite the Yankee face, and the operation proves so much more painful to the Brazilian nose than to the Yankee face that Brazil shows signs of repentance. The United States can get along without Brazilian sugar, but Brazil sadly needs the revenue to be derived from the sale of sugar to the sweet-toothed, long-pursed, luxury-loving Yankee, and it will be a difficult task for the Britons to make Brazil believe that it is the proper thing for her to sacrifice herself to please British prejudice. The Rio de Janeiro flouring-mills are not paying. They have to send to New York or Baltimore for wheat to grind. They will become less and less important in the near future.

THE GRAIN TRADE OF BUFFALO.

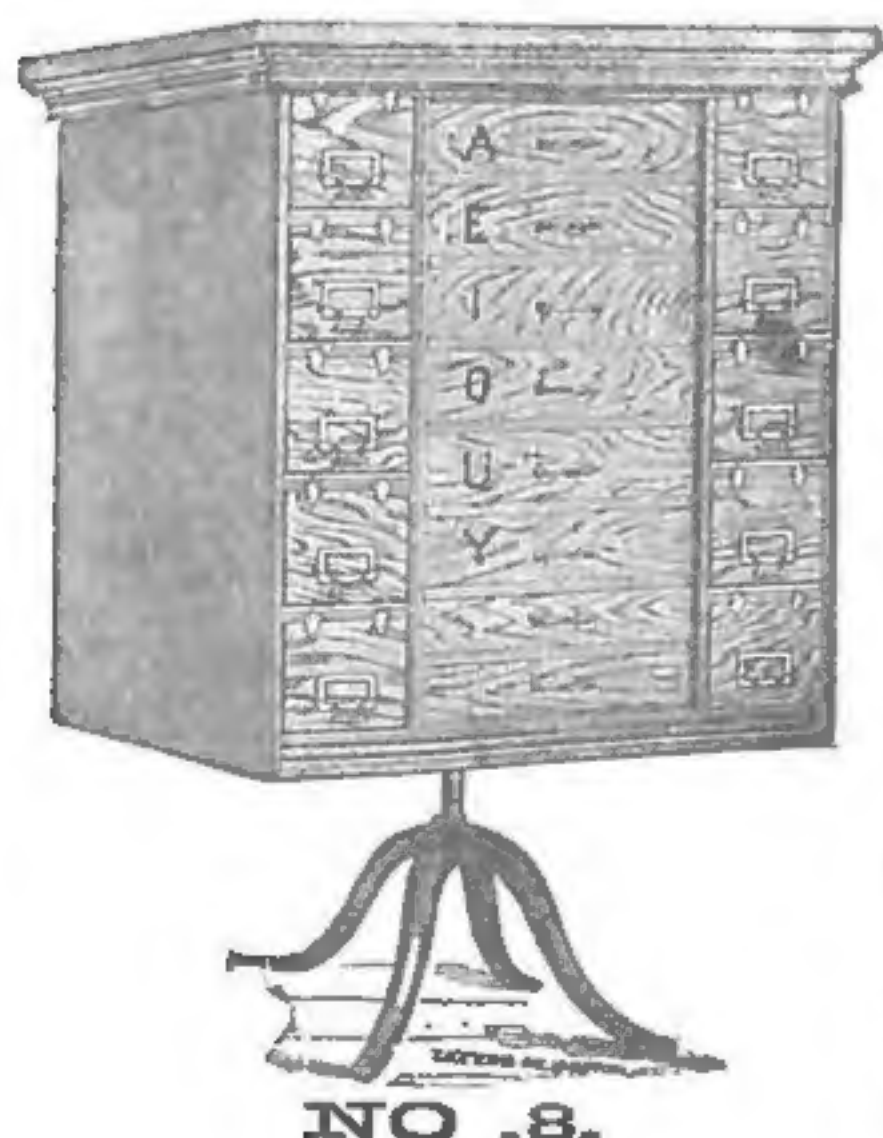
The eastward movement of flour and grain from the west through Buffalo for the month of August, 1889, shows a decrease of 148,271 barrels in receipt of flour and a decrease of 2,182,234 bushels in the receipts of grain, estimating flour as wheat, compared with the same month last year. The following table shows the imports of flour and grain into Buffalo, by lake, for the month of August, and from the opening of navigation to August 31, 1889, compared with those for previous years:

FOR THE MONTH OF AUGUST.			
	Flour, bbls.	Grain, bu.	Grain, inc. Flour, bu.
1889.....	551,260	12,141,862	14,898,162
1888.....	699,531	13,581,741	17,070,396
1887.....	711,089	10,048,392	13,603,837
1886.....	519,907	11,155,882	13,755,417
1885.....	288,035	7,760,568	9,200,743
FROM OPENING TO AUGUST 31.			
	Flour, bbls.	Grain, bu.	Grain, inc. Flour, bu.
1889.....	2,279,641	47,252,311	58,650,516
1888.....	2,646,601	42,527,106	55,760,111
1887.....	2,233,928	49,517,448	60,687,088
1886.....	2,455,685	42,591,467	54,869,892
1885.....	1,182,453	28,462,880	34,378,170

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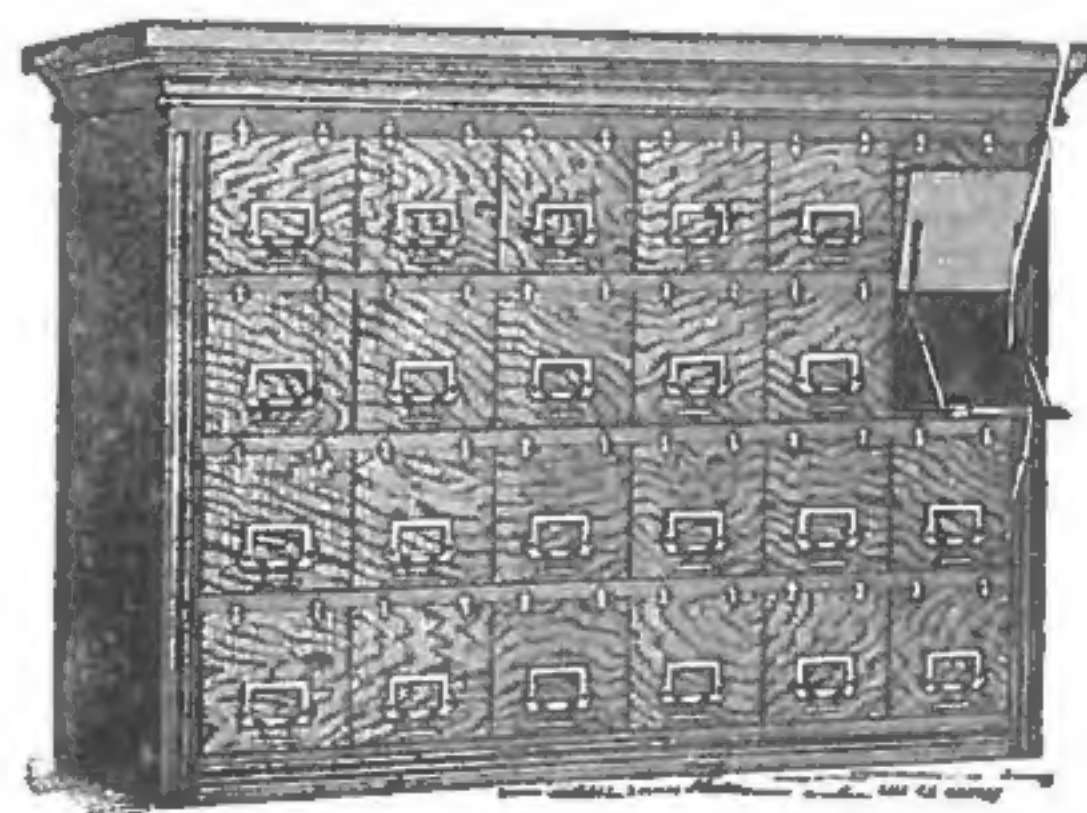
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St. Louis,	302, 304 Washington Av.	Fairbanks & Co.
Kansas City,	312 Union Avenue,	
Denver,	1330 Seventeenth St.	
Omaha,	1619 Capitol Avenue,	F. C. Ayer.
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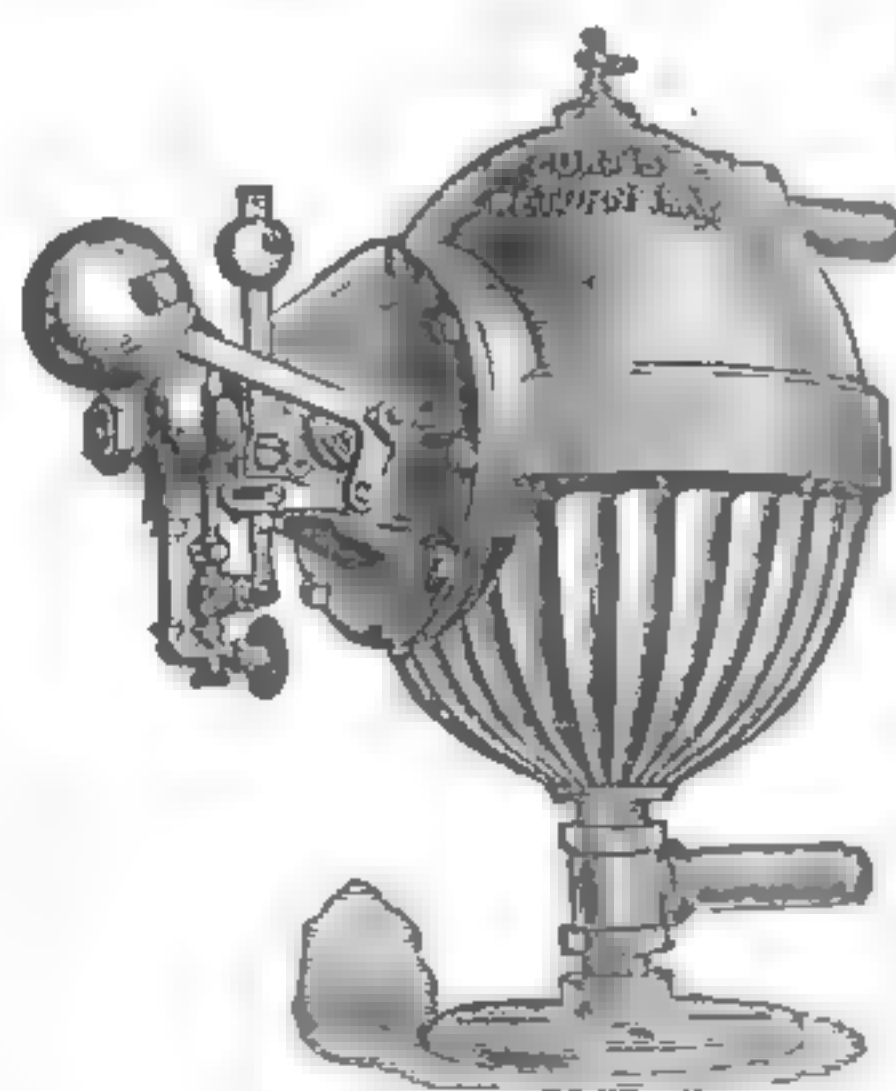
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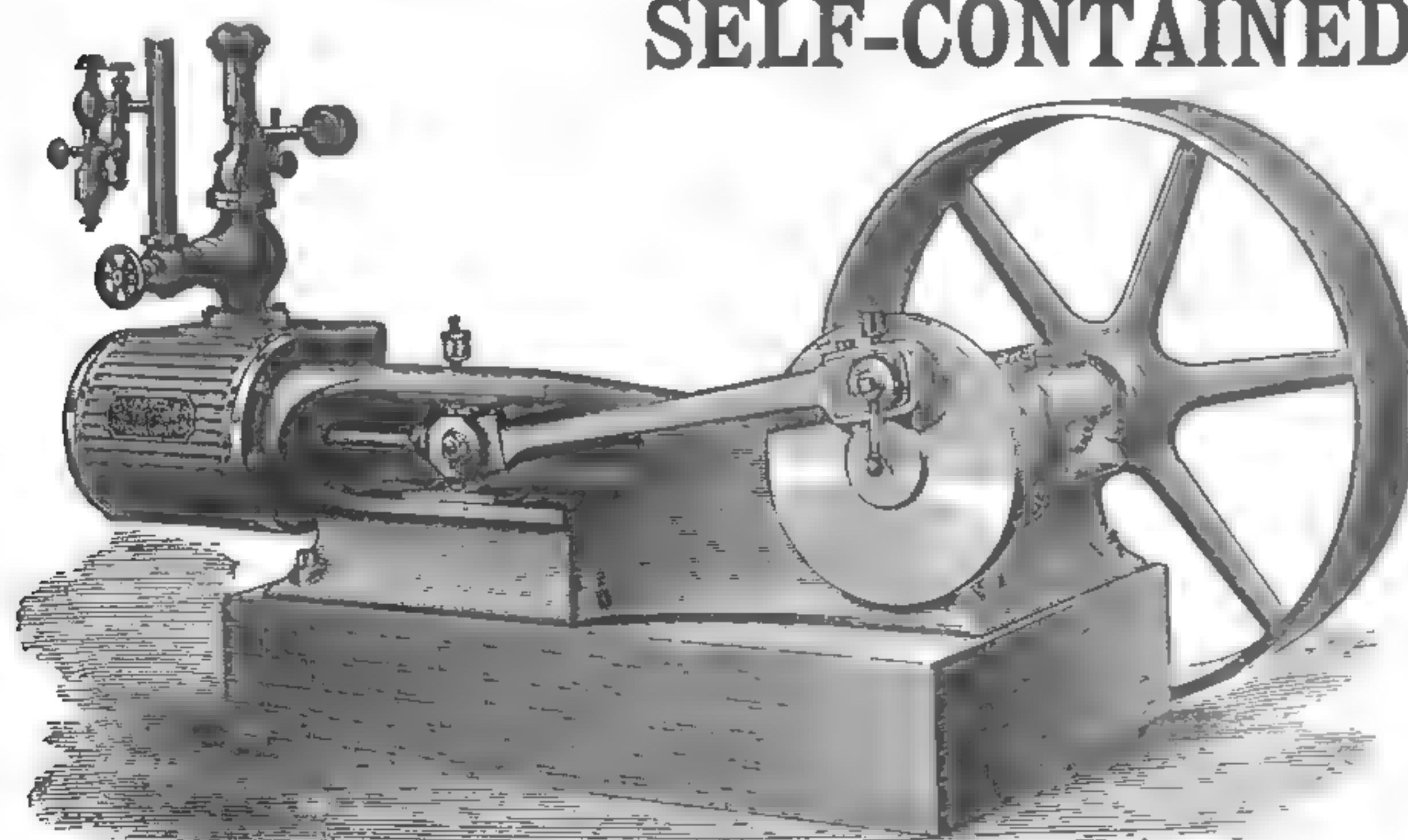
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D. Oliver's mill, Joliet, Ill., burned.
 Columbus, Ga., men project a flour-mill.
 J. Pace, Gibland, La., builds a grist-mill.
 H. L. Serooss's mill, Manchester, Ia., burned.
 Wichata Falls, Tex., men project an elevator.
 Hall & Co., Gladdens, S. C., build a grist-mill.
 London, Tenn., men project a \$30,000 flour-mill.
 V. Wiess, Beaumont, Tex., has points on a flour-mill.
 E. G. Perez, San Diego, Tex., built a \$6,000 corn-mill.
 S. O. Couch, Logan's Chapel, Ark., builds a grist-mill.
 The Sweetwater, Tenn., Milling Co. put in new machines.
 Clougher's elevator, Otterburn, Man., burned; loss \$3,000.
 W. L. & J. J. Cravens, Hartman, Ark., build a grist-mill.
 Nuzum & Hieronymus, Grafton, W. Va., put in a feed-mill.
 The Miami Co.'s elevator, Dayton, O., burned; loss \$25,000; insurance \$13,000.

The Central Illinois Corn Mill, Springfield, Ill., burned; loss \$7,000; insurance \$3,000.

The Webster County Farmers' Alliance, Weston, Ga., are building a corn-mill at that place.

The Cincinnati, Hamilton & Dayton R. R. elevator, Cincinnati, O., burned; loss \$50,000; fully insured.

The Freeport, Ark., flouring-mill, burned; loss \$10,000; insurance \$4,000; fire caused by a defective smokestack.

The Standard, Excelsior and St. Anthony milling properties, of Minneapolis, have been consolidated under the name of the Minneapolis Flour Manufacturing Company, with a capital of \$600,000. The three mills will give the corporation a daily aggregate capacity of close to 34,000 barrels and make it the owner of about the third largest capacity in the country.

Reports received by St. Louis commission men in regard to the barley crop show that in Iowa most of it is badly stained by too much rain. In the river districts of Minnesota some bright barley is found, but some of it is of light weight, while back through the country some discolored grain is found. On the whole, the crop there is a good one, as high as 60 bushels to the acre having been secured. The Wisconsin crop is almost perfectly sound, having a bright color. In Canada fully two-thirds of the crop has been discolored, and very little will grade No. 1.

Says a recent Odessa, Russia, report: Every day brings fresh proofs in confirmation of previous reports about the harvest being considerably worse than Government or any other interested reports would lead one to expect. Without a doubt the yield is very bad. Although some wheats are of good quality the greater part are very poor, and the want of rain experienced is evident from the dry, shriveled condition of the grain. The arrivals of the new grain are at present very small, and we do not expect to have any appreciable quantity before at least three to four weeks. It is only the large reserves of last year's wheat which keep prices down at the prices quoted to-day. In consequence of there being no business whatever done recently some holders are disposed to moderate their ideas; but the new grain not arriving yet for some time, everybody is pretty firm, and as soon as a buyer shows himself prices stiffen immediately.

Says the Montreal, Canada, *Trade Bulletin*: Advices from the Stratford district have just been received in this city, stating that the new wheat threshings are turning out very badly, the majority of the samples threshed so far showing light weight and yield. A large farmer in the above district cut and threshed a field of wheat which looked magnificent when standing, and to his surprise it turned out inferior in quality, light in weight and short in yield. Other farmers in the same district report the greater portion of their new wheat so far threshed as weighing from

55 to 57 pounds per bushel. The advices referred to add that it is hoped the threshing to be heard from will turn out much better than those already mentioned. A party in the trade, however, who is generally well posted on the condition of the crops, states that he is positive there will not be more than half an average yield of wheat in all Canada. There can be no doubt that the crop in Ontario has suffered considerably from rust which set in some weeks ago.

Mr. Stockenstrom, the Minnesota Commissioner of Statistics, has received crop estimates from 40 counties, or half the entire number in the State. The returns go to show that the Minnesota wheat crop will be the largest the state has ever produced. Two of the counties show an average yield of 25 bushels per acre, ten have yielded 20 bushels per acre, 14 show up with 15 bushels to the acre and the remainder are under 15 bushels. The general average for the 40 counties is 16.10 bushels per acre, against about 10 bushels last year. If this average is held up in the counties not yet heard from the entire crop in this state will be between 45,000,000 and 50,000,000 bushels.

The official crop report of Manitoba, according to the *Winnipeg Commercial*, places the total area of wheat sown this year at 623,245 acres. The latest official crop bulletin from the same source estimates the average yield at 14.8 bushels per acre. Throwing off the decimal, and figuring up the average as per official report at 14 bushels gives a total crop of 8,725,430 bushels of wheat for Manitoba. This makes a yield very considerably in excess of last year, and the claim is made that Manitoba will have double the quantity of wheat for export that it had from last crop. The figures given, if realized, will admit of exports nearly double the amount from last crop. To the total wheat crop of Manitoba for 1889, as indicated, must be added the wheat crop of the territory of Assiniboia, which moves out with Manitoba wheat. No statistics are available of the acreage and probable yield of Assiniboia, but say 1,000,000 bushels can be counted upon making a total for both of 9,725,000 bushels. From this total some 7,000,000 bushels would be available for export, and the balance would be ample for home requirements.

The grain export business at the St. Louis market at present is of larger volume than it has been for years. Local exporters buy and ship out the wheat and corn receipts almost as fast as they arrive, they being restricted in the amount of their shipments only by their inability to get barges in which to haul away the grain. Handlers report hindrance on this account and say that if the export demand continues as good as it has been recently the trade will be in a measure hampered for lack of sufficient carrying capacity. Not only is there a very large European demand, but some of the countries of South America are very heavy purchasers. One dealer is now making shipments of wheat to New Orleans to load three vessels for Montevideo, Uruguay. These vessels will carry 300,000 bushels of grain. The stock of wheat in St. Louis elevators on August 20 of last year was 2,619,775 bushels, while on August 25 this year it was but 928,885 bushels, or about one-third of what it was a year ago, despite the great difference in the crops in the two years. The stock of corn in St. Louis elevators a year ago was 536,734 bushels, and now but 375,902 bushels.

The Committee on Grain of the New York Produce Exchange has established the official grades of grain as follows: Extra white winter wheat shall be bright, sound, dry, plump and well cleaned. No 2 white winter wheat shall consist of sound white winter wheat unfit to grade No. 1. No 3 white winter wheat shall consist of sound white winter wheat unfit to grade No. 2. No 1 red winter wheat shall be sound, dry, long-berried and well cleaned. No 2 red winter wheat shall be sound, dry and reasonably clean, weighing not less than 58½ lbs., Winchester standard, and shall contain over 10 per cent white wheat. No 3 red winter wheat shall consist of winter wheat unfit to grade No. 2 red. Extra red winter wheat shall be sound, dry and clean, weighing not less than 59½ lbs. to the measured bushel, Winchester standard. No 4 winter wheat shall include all sound winter wheat unfit to grade No. 3 red. Mixed winter wheat shall be all white and red mixed, and shall be equal to No. 2 red in all other respects. Steamer winter wheat shall be equal in all respects to quality to the above grades, but which shall be slightly soft or damp. No 1 red and No. 2 red wheat that grade steamer shall be graded No. 2 red. Rejected winter wheat shall include all merchantable winter wheat unfit to grade No. 4.



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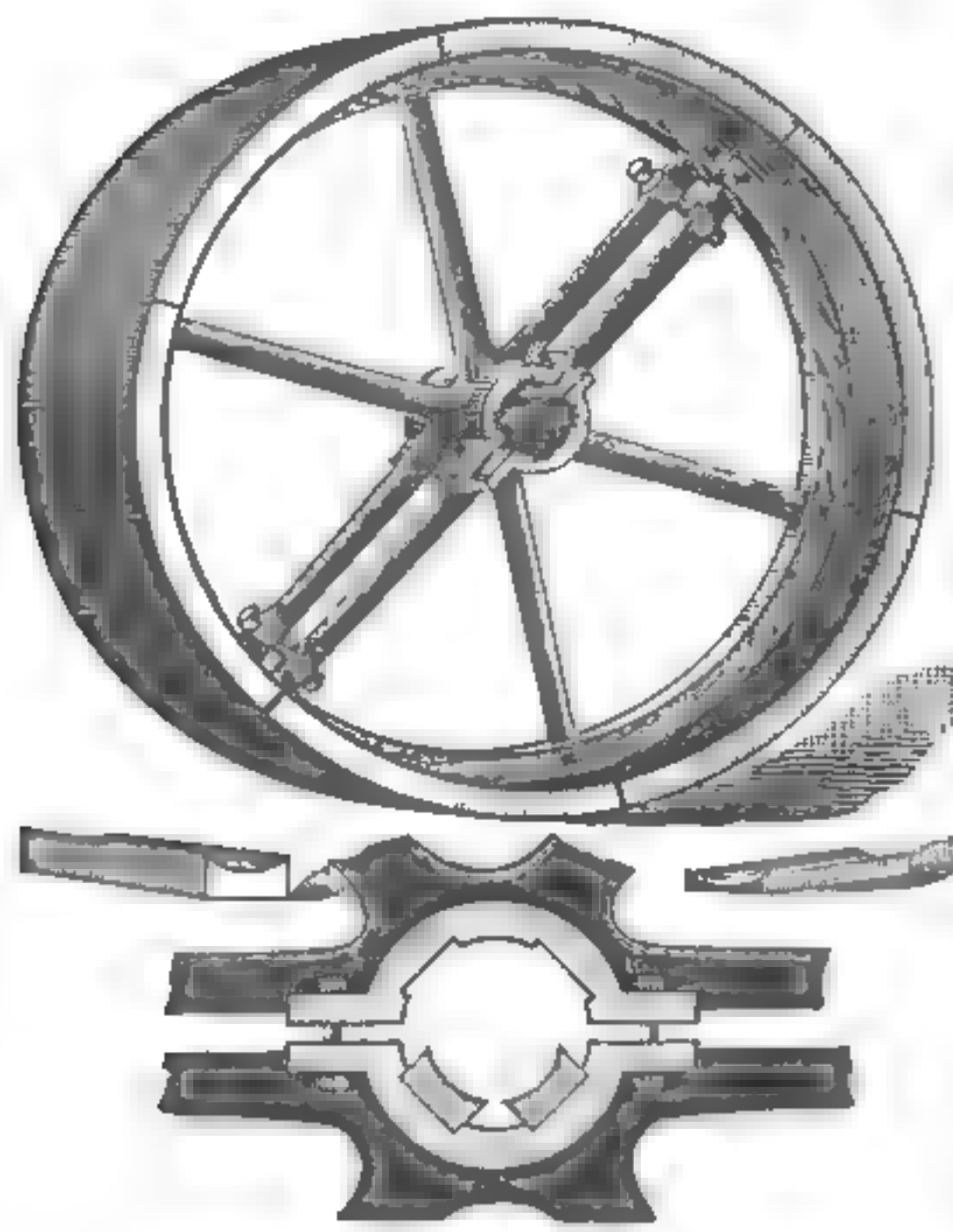


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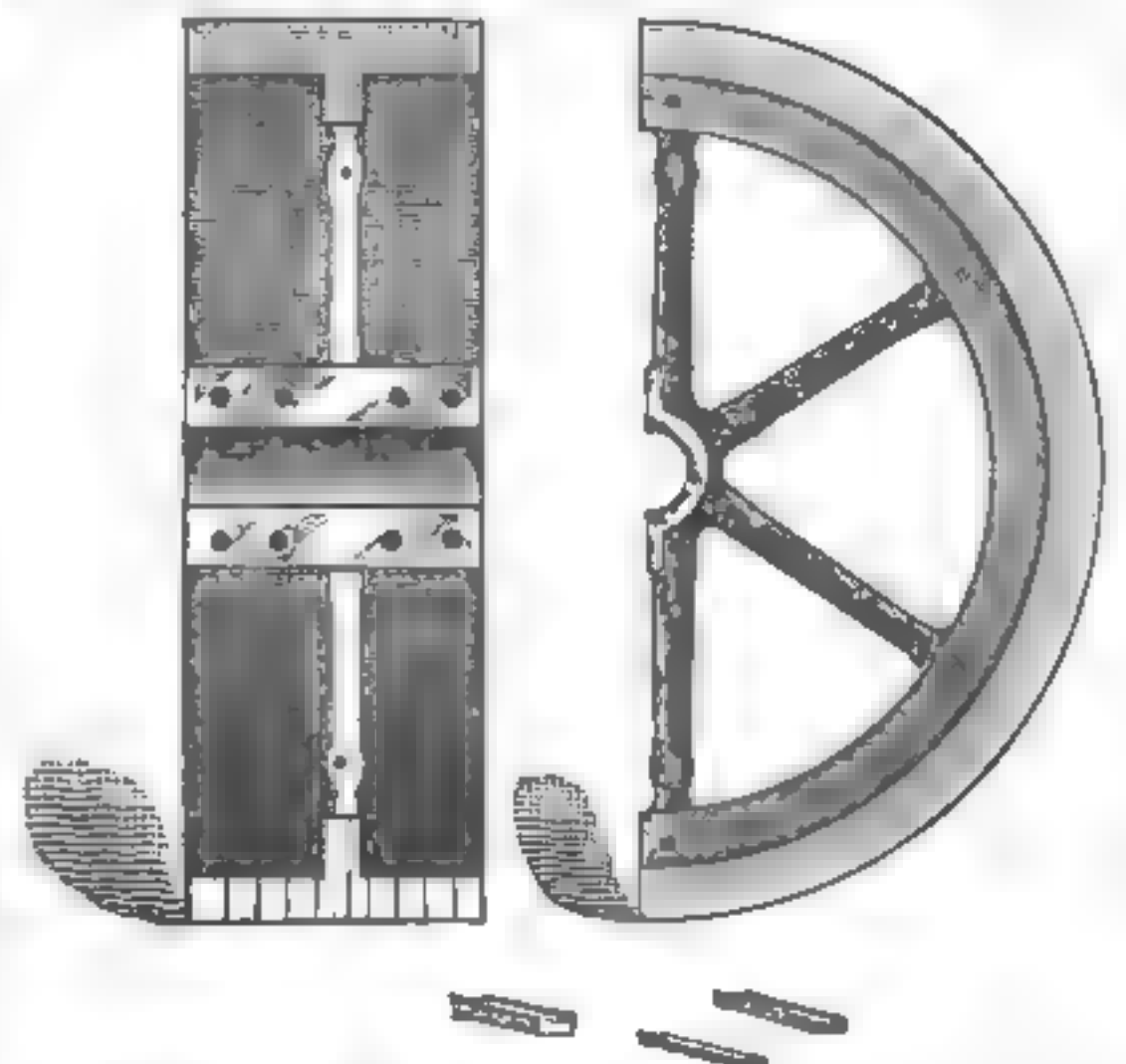
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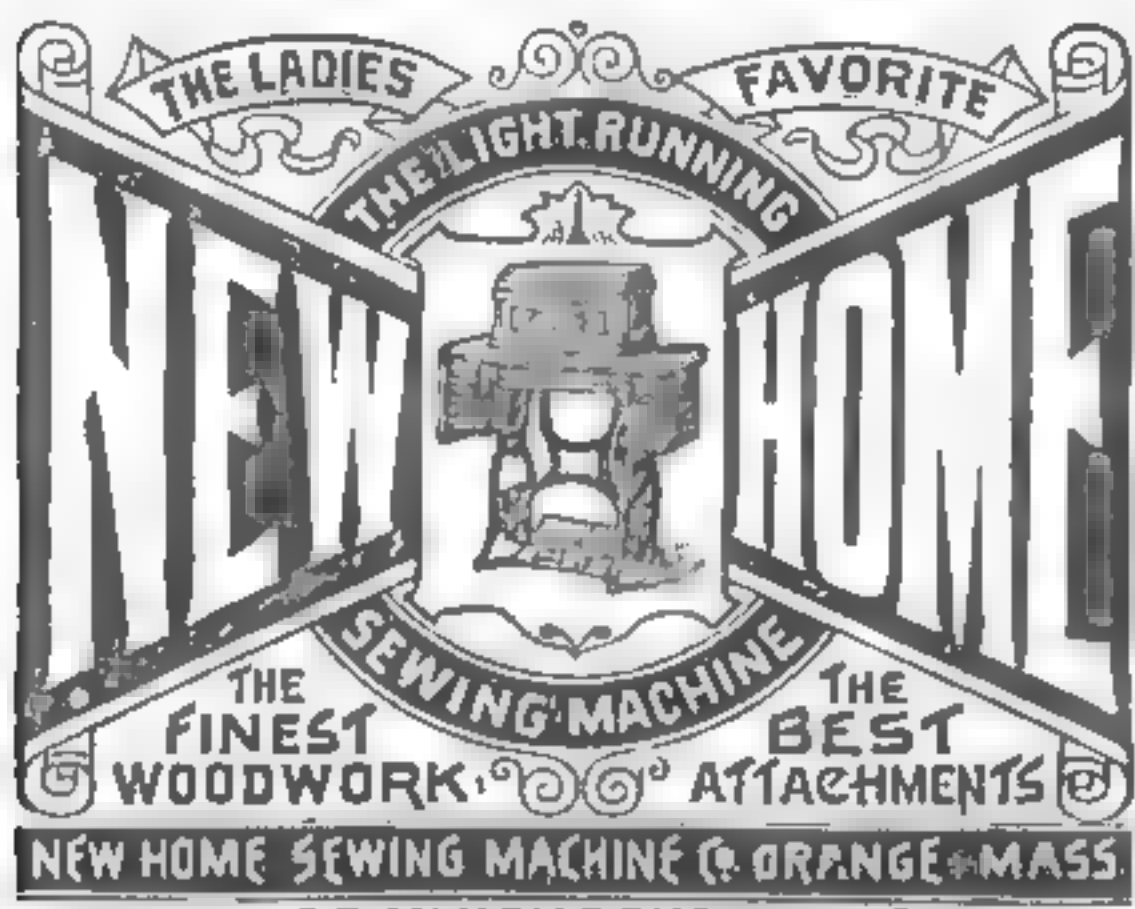
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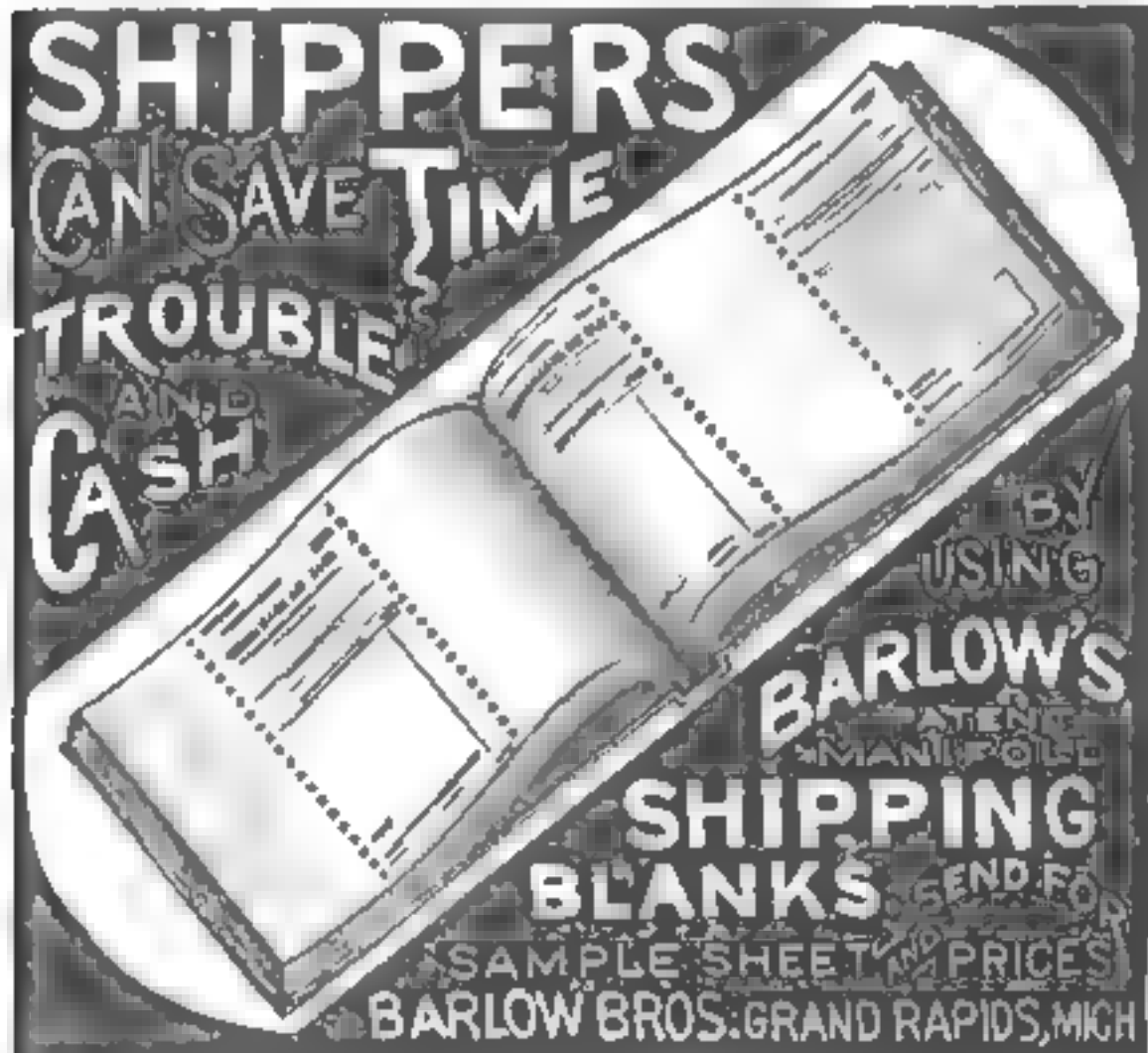
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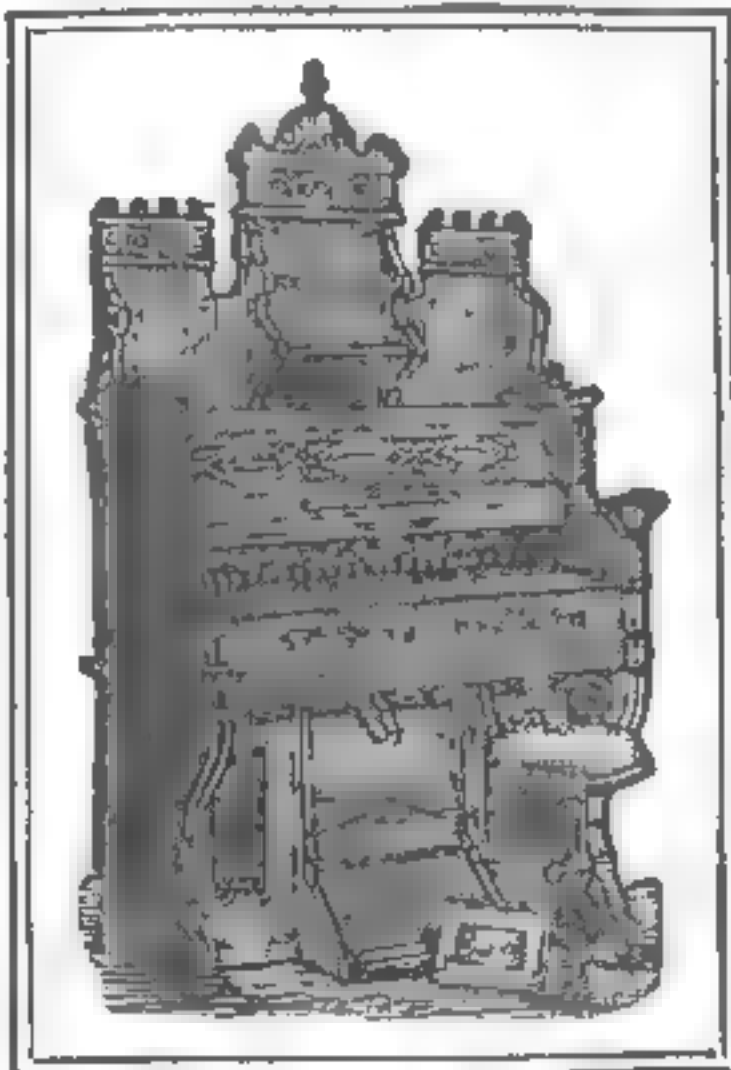
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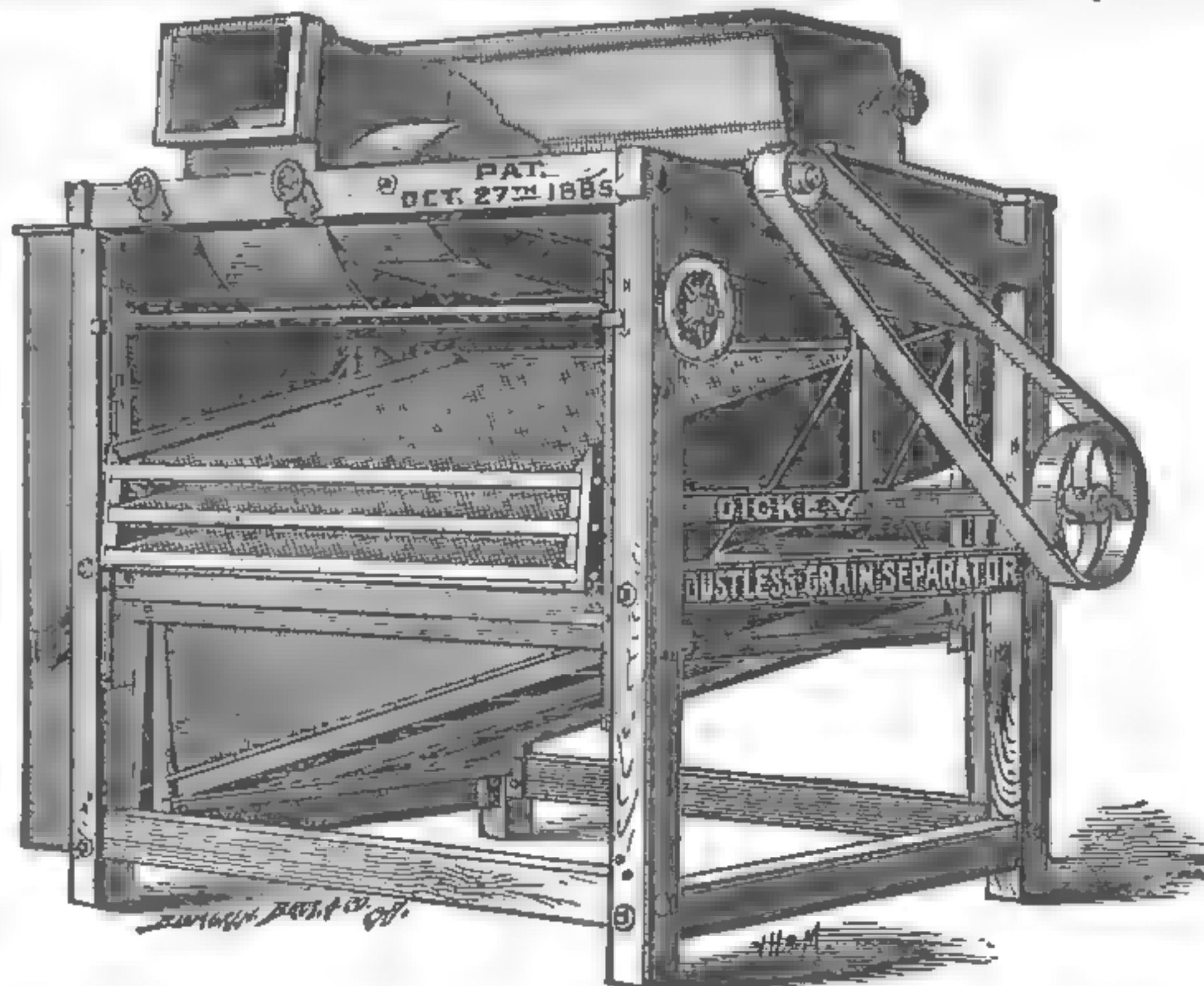
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We claim for it Superiority over everything of the kind made, in simpleness, durability, saving of power, capacity and cost of construction. Its height will accommodate any number of spouts from different points, without moving machine. They have a capacity from 700 to 1,500 bushels per hour. We also control exclusively the manufacture of the celebrated Dickey Giant, End and Side Shake, Warehouse Mills, that have attained such a world-wide reputation. Sent on approval to any reliable party. For full particulars address,

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EUROPEAN ECHOES.

SAYS the London "Millers' Gazette" of August 19: P. Fremlin, of Wrotham Waters, Wrotham, writing on Saturday, says that crop estimates are very much over-stated this year. Reporting on an area of 15 miles from Wrotham, which carries one into Essex, where his men have just finished cutting and where they say the crops are the lightest they ever cut, Mr. Fremlin estimates wheat to be 10 to 15 per cent. below an average, and very irregular in quality; barley 20 per cent. below an average and bad in color; oats 10 per cent. below; beans 40 per cent. below, many being plowed up. From this and other evidence we fear that a considerable reduction will have to be made from the first estimates of the wheat crop, which, instead of being an abundant one, can not now be considered as promising, on the whole, any thing above an average.

RECENT letters from Southern Australia state that it is a new feature in the weather chronicles of that country to have to record complaints from many districts, pastoral as well as farming, of too much rain. Yet in this phenomenal season agricultural operations are for the time at a standstill in consequence of the complete saturation of the soil and the impossibility of working in the fields either for plowing or sowing, and a large acreage which with brighter weather could have been put under wheat will be left untilled. The rain-fall for the current year to May 31 was 13.767 inches, and up to the 21st of July has been approximately 5 inches, making close on 19 inches from New Year's day to date, a record which has not been touched during the half century which comprises nearly the history of the colony. The prolonged wet weather and the desire of the farming community to put in all the crop they can possibly find wheat for have prevented carting, but there are still some good parcels of wheat in grower's hands, which will now come in. There is an excellent prospect of quantity for our coming harvest, but the outlook as to price per bushel at the opening of the coming year is certainly not favorable.

REPORTS from France indicate that farmers have been profiting by recent fine weather in harvesting their crops. Great disappointment is expressed, as the crops are turning out smaller yield and poorer quality, even, than was anticipated. At Auch the average weight of wheat is said to vary much. It was laid by storms, and the intense heat matured it irregularly. Oats are very unsatisfactory, and barley, while abundant, has been injured by the rains. At Aix-en-Othe the number of wheat sheaves is very large, but the yield will be unexpectedly small. Barley is in bad condition and oats continue in fine shape. At Alais what grain there is is generally of very poor quality, and the farther the harvest progresses the greater is the disappointment. At Lille there has been bad weather, which has seriously re-

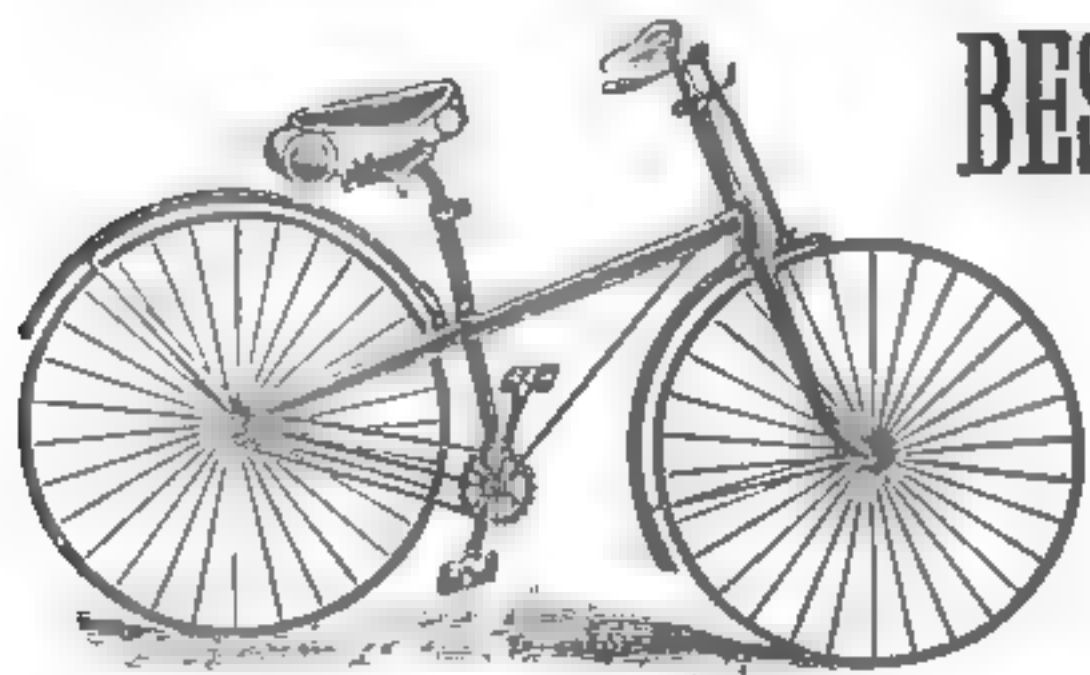
tarded harvest and also damaged the quality of the wheat, which is for the greater part still standing in sheaves, for only about one-quarter of the crop had been brought in before the bad weather set in. The result is that no threshing can be done and that, therefore, all which may be said about either the quality or the yield can only be premature. One thing is certain, all optimistic previsions, which so long prevailed, will have to be discounted.

SAYS the London "Millers' Gazette" of August 19: The American official returns have been published this week, showing the extent of the shipments for the season ended June 30, 1889. The monthly shipments are given as follows:

	1888-89. Barrels.	1887-88. Barrels.
July.....	803,925	632,118
August.....	871,206	1,144,490
September.....	939,564	1,172,847
October.....	931,189	1,018,862
November.....	580,076	1,084,319
December.....	698,613	1,171,365
January.....	685,244	1,023,923
February.....	666,778	996,340
March.....	669,006	944,879
April.....	646,365	965,306
May.....	747,309	900,691
June.....	736,740	756,027
Total 12 months.....	8,976,015	11,610,467

There has thus been a falling off of 2,834,000 barrels compared with the previous season, during which the shipments were the largest on record. It now remains to ask what will be the likely shipments of flour in the season just commencing. With 90,000,000 bushels more wheat grown than last year, and especially with no inflated wheat prices at the start, there seems every possibility of the lost ground being partly made up; we may be sure at any rate that American millers will strive to this end, and they are already offering patents to arrive at the low price of 30 shillings c. i. f., which is quite 5 shillings below Hungarian patents, and is indeed running home make very close; we have, however, yet to learn what the quality of the new flour is like; if it is no better than last season's the lost trade will be difficult to be regained. This great falling off in the American flour shipments in the past season has led to a corresponding decrease in our imports of the manufactured article, which in the 11 months ended July 31 were 12,963,138 hundredweights, being 3,580,000 hundredweights, or 1,430,000 sacks of 280 pounds less, than in the corresponding period last year. Surely British and Irish millers must have had good times, seeing that they have had to make nearly 1,500,000 sacks more flour than last year.

In Paris, France, there are 73,342 houses of all classes. Of that number 5,518 have but one story, 13,464 have 2 stories, 10,337 have 3 stories, 8,806 have 4 stories, and 35,210 have 5 stories.



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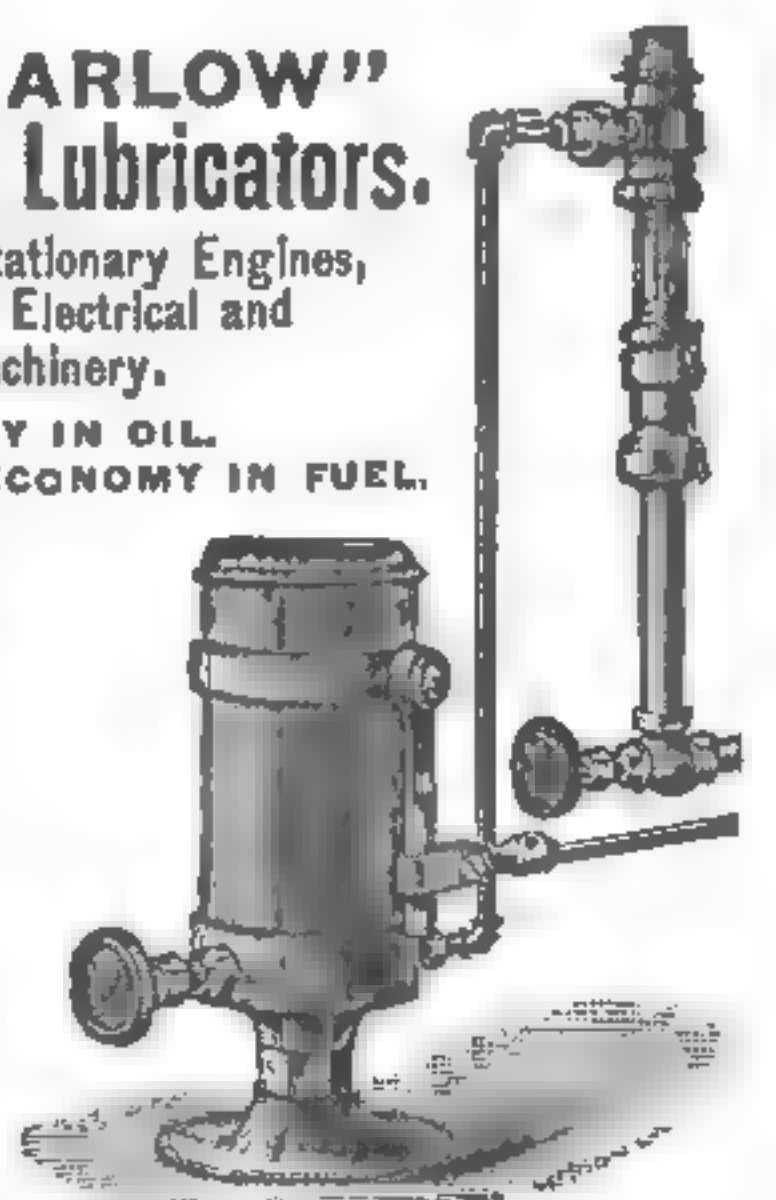
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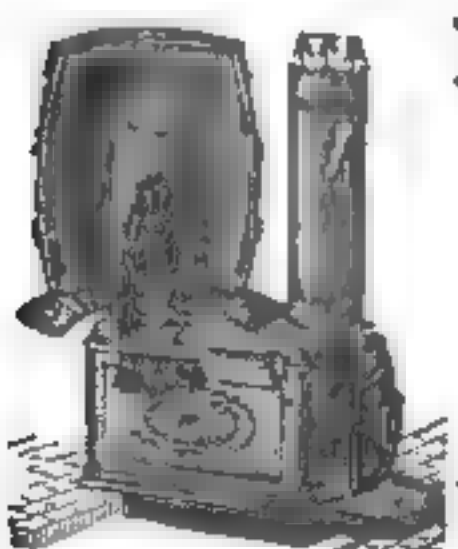
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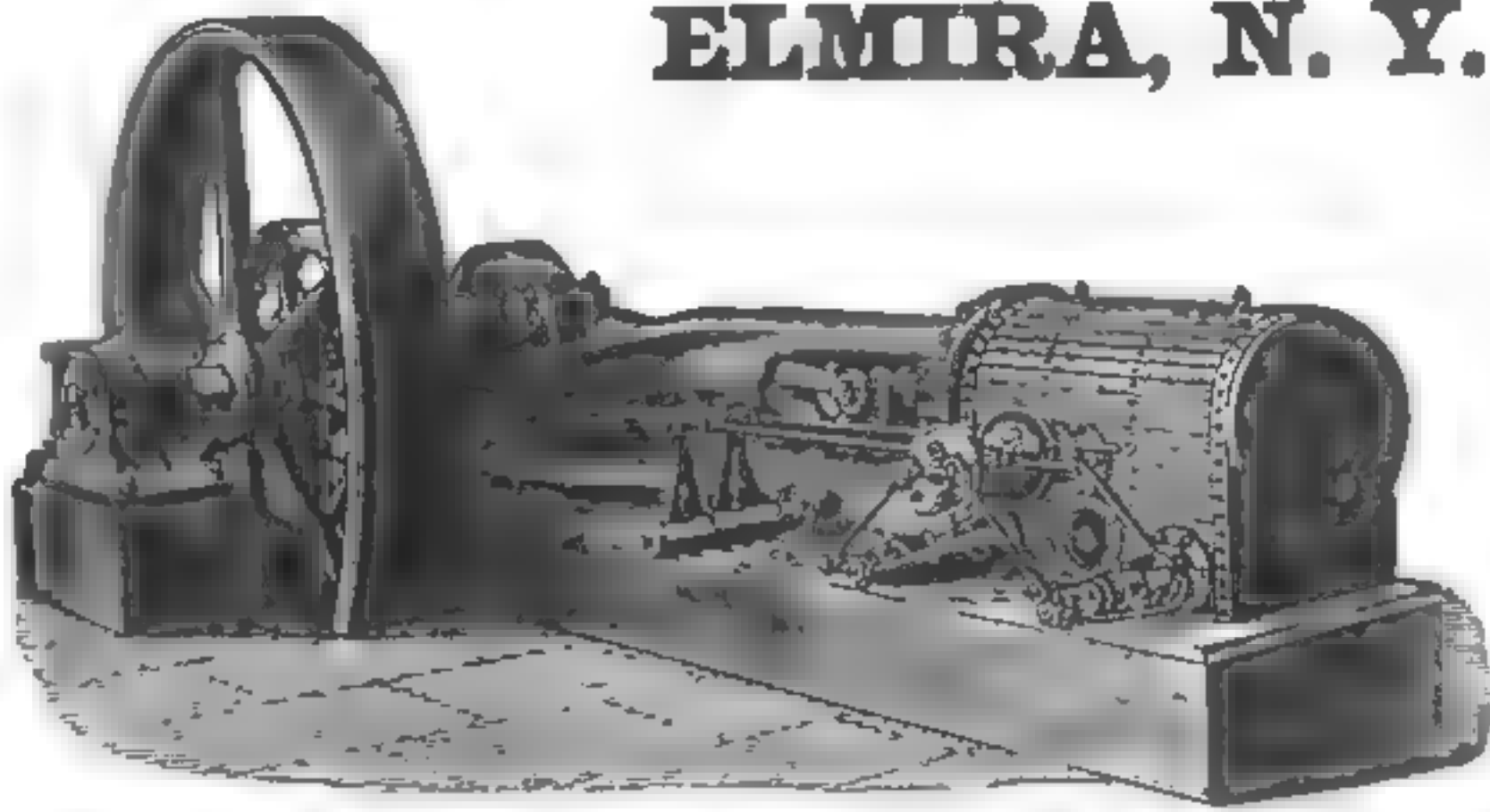
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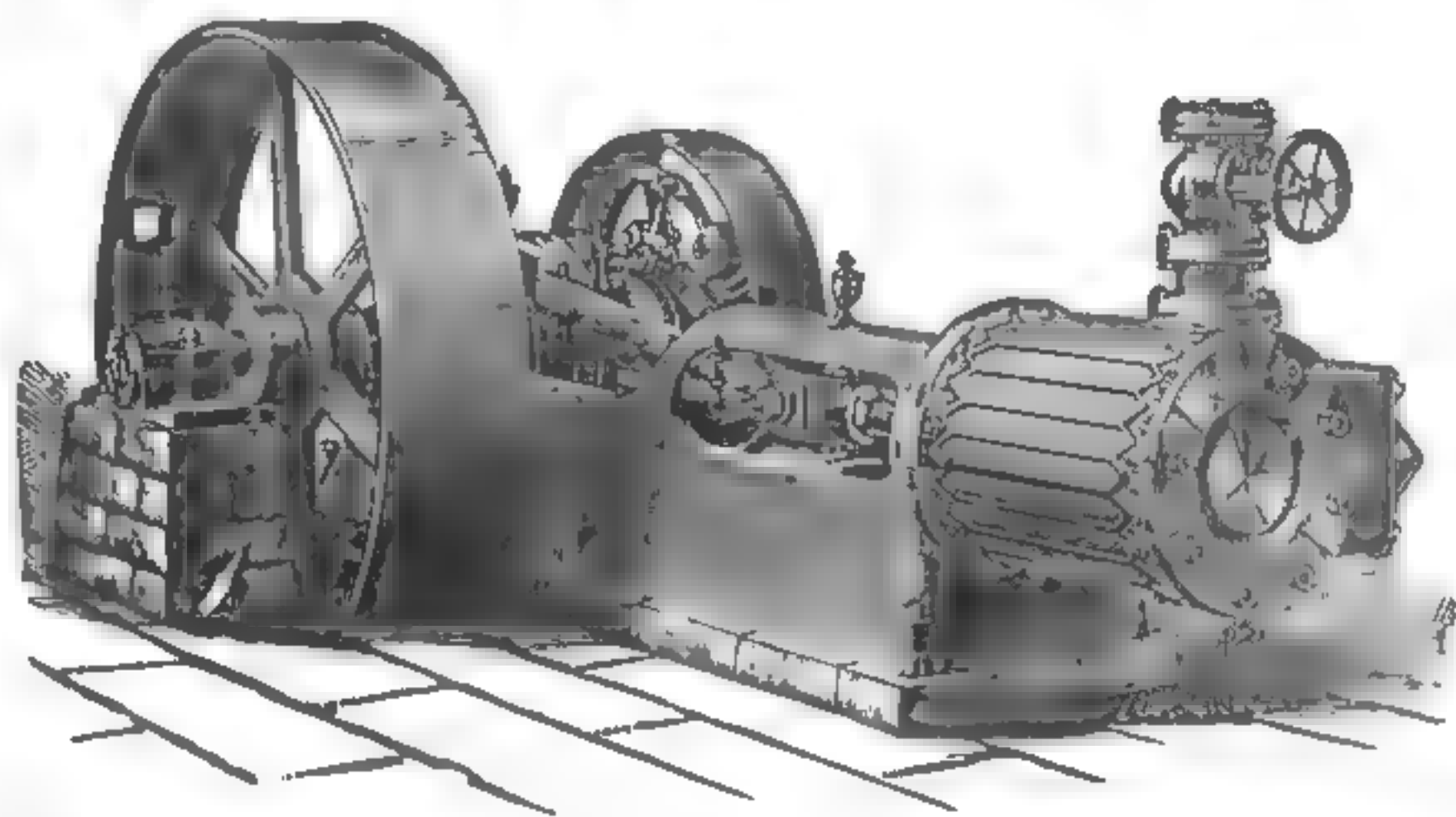
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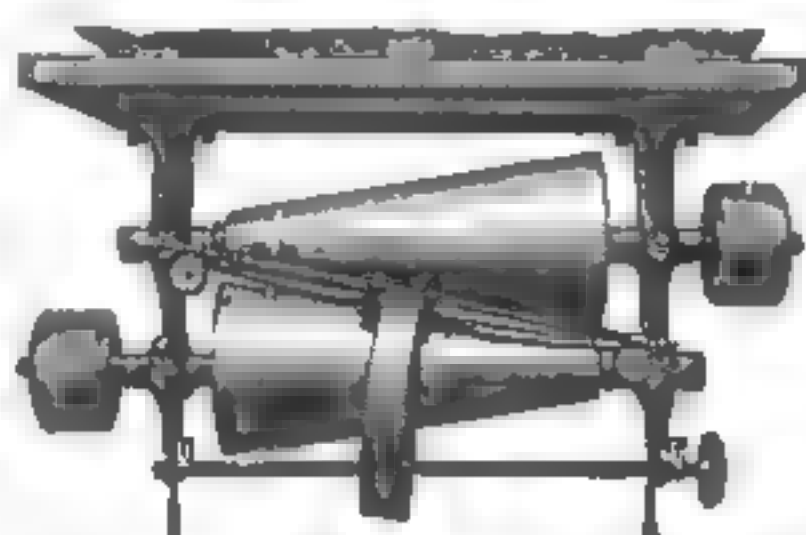
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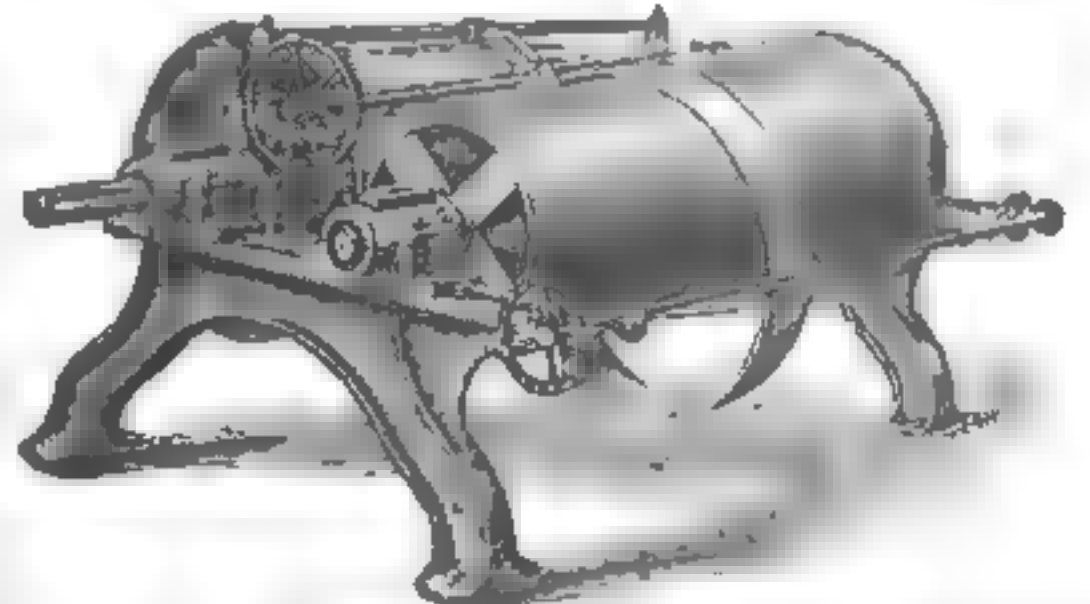
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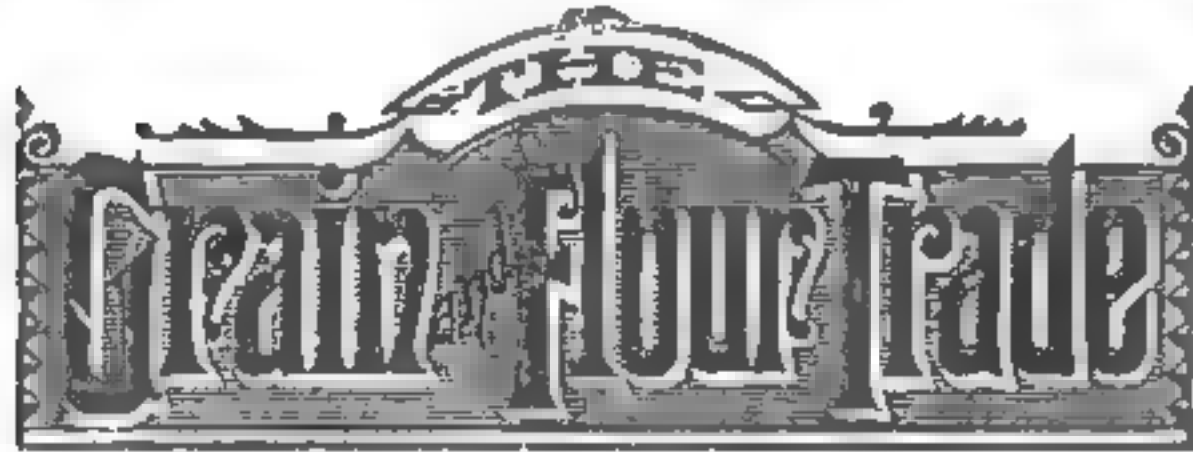
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NATIONAL PULLEY COVERING CO., BALTIMORE, MD.



OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Sept. 7, 1889.

Friday of last week was a day of weak, dull and lower markets generally on foreign selling and lack of demand, with fine weather reported in the West and in Europe. August wheat closed at 84½c. and September at 84c. Options 1,240,000 bushels. August corn closed at 42½c. and September at 42½c. August oats closed at 25½c. and September at 25½c. Wheat flour was generally dull and unchanged, although firmer on low grades, which were scarce and wanted for both home and export trade. The minor lines were quiet and featureless.

Saturday opened dull and weak, but rallied and closed steady. September wheat closed at 84½c. Trade was slow. September corn closed at 42c. and oats at 25½c. Wheat flour was dull and practically nominal at unchanged prices. Exporters took some lots for England and the West Indies. The other lines were unchanged.

Monday was the "Labor Day holiday," and the bulls and bears forbore operations for the day.

Tuesday brought renewed dullness and irregularity, with reports of large receipts in the west. September wheat closed at 84½c. Options 1,800,000 bushels. September corn closed at 41½c. and oats at 25½c. Wheat flour was dull and easier, though not notably changed. The minor lines were featureless. The visible supply in the United States and Canada was:

	1889. Aug. 31.	1888. Sept. 1.	1887. Sept. 3.
Wheat.....	14,885,716	29,269,673	30,687,129
Corn.....	11,755,584	8,496,447	6,836,850
Oats.....	6,130,658	3,572,972	4,734,085
Rye.....	924,824	247,573	309,665
Barley.....	291,776	84,450	291,942

Wednesday brought reports of frost and snow in the west, which strengthened corn and oats, while wheat was steady and flour lower. September wheat closed at 84½c. Options 1,150,000 bushels. September corn closed at 42½c. and oats at 26c. Rye grain was nominally 49-@52c for No. 2 western, c. i. f., spot delivered, and 55c for State No. 1 delivered. Barley was offered 70@72c for Canada to arrive in October. Malt was nominally 90c@91 for Canada and \$1.05 for choice. Mill-feed was dull, weak and lower at the following quotations: Mills and on track, 40 lbs. 56@57½c; 60 lbs the same; 80 lbs the same; 100 lbs and sharps, 70@85c; rye 70c. Other kinds nominal.

Wheat flour was dull, weak and lower for all grades above \$3 by 5@10c. to sell. Exporters did little. Following are the quotations for the day:

SPRING FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.60@1.85	\$....@....
Fine.....	2.00@2.20	2.15@2.25
Superfine.....	2.25@2.45	2.50@2.80
Extra No. 2.....	2.50@2.75	2.75@3.00
Extra No. 1.....	3.25@3.50	3.50@4.05
Clear.....	3.35@3.65	3.65@3.80
Straight.....	4.00@4.40	4.40@5.00
Patent.....	5.00@5.30	5.40@5.60

WINTER FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.75@2.00	\$....@....
Fine.....	2.25@2.50	2.35@2.60
Superfine.....	2.60@2.75	2.60@2.80
Extra No. 2.....	2.65@2.90	2.75@3.00
Extra No. 1.....	3.10@4.15	3.25@4.10
Clear.....	3.65@4.05	4.00@4.15
Straight.....	4.25@4.40	4.45@4.55
Patent.....	4.50@4.65	4.75@4.80

CITY MILLS.		
	Sacks.	Barrels.
W. I grades.....	4.20@4.25	
Low grades.....	2.60@2.70	
Patents.....	5.10@5.65	

Rye flour was dull at \$2.75@3.00. Corn products were irregular at the following quotations: Coarse meal, 82@83c; fine yellow, 95c; fine white, \$1@1.05; Brandywine, \$2.75; Southern and Western, \$2.60@2.75; grits, \$2.60@2.70; hominy grits, \$3 in barrels, \$1.20 in sacks; granulated brewers' meal, \$1.30 per 100 lbs in sacks. Corn flour, \$2@3 for bbls; chops 60@65c.

Thursday saw no particular changes in market conditions. September wheat closed at 84c. Options 680,000 bushels. September corn closed at 42½c. and oats at 26½c. Wheat flour was weaker. Trading was small. The minor lines were featureless.

BUFFALO MARKETS

WHEAT—There was little doing at the Exchange in the early part of the day; prices were nominally unchanged; spot old No. 1 hard of crop '87 was held at 95c, do of crop '88 at 91c; No. 1 Northern was quoted at 88c, No. 2 do at 85c, No. 1 Northern (Chicago) at 89c, and No. 2 spring at 87c. At the close the demand was fair and the market steady with the following sales: 1,100 bu of crop '88 at 91c, 600 bu No. 1 Northern at 88c, and 2,000 bu No. 2 Northern at 85c; 88c was asked for New No. 1 hard to arrive. Winter wheat in fair demand and market steady; 6 carloads No. 2 red changed hands at 75½@76c, 4 do No. 3 extra red at 78@80c, 3 carloads No. 2 red at 88c on track, old No. 2 red (Chicago) was offered at 86c, No. 2 amber at 84@84½c in store, No. 2 white at 82c, No. 2 extra do at 84c, 86c was asked for No. 1 white on track, and 91c for No. 1 white California in store. **CORN**—In moderate demand and market weak; sales were made of 15,000 bu No. 3 corn at 88½c, but about an hour later 88½c was asked; No. 2 do sold at 88½@89c, and No. 2 yellow at 89½@89¾c in store. At the close the market was firmer at the following prices: 89½c asked for No. 2 yellow, 89c for No. 2 corn, and 88½c for No. 3 corn, all in store. **OATS**—Demand for spot oats light and market dull and weak. The only sale reported was 25,000 bu Chicago No. 3 at 24½c in store; No. 2 white was quoted at 25c, No. 3 do at 23c, No. 2 mixed at 23c, No. 3 oats at 21½@22c, ¼@½c more for choice No. 3 and white State oats from farmer's wagon 30@33. **RYE**—Dull at 47c for No. 2 Western on track. **BARLEY**—The opinion of most local traders is that 50@60c will be the highest price paid for Western and 75c for the best Canadian. **CANAL FREIGHTS**—Firm. Rates of freight on wheat to New York 4½c on corn 4c, on oats 2½c, on rye 4c, and on flaxseed 4½c; on corn to Albany 3½c; c'm to Schenectady and Rotterdam 8½c, on oats 2½c; on corn to Utica 2½c; on wheat to Syracuse 2½c, on corn 2½c, wheat to Rochester 1½c. **LUMBER** to New York \$2.25, to Albany \$1.75. **RAILROAD FREIGHTS**—To New York, Baltimore and Philadelphia rate points on grain, flour and feed, 13c per 100 lbs; to Albany and West Troy, 10½c. **FLOUR**—City ground—Patent spring, \$6.00@6.25; straight Dutch spring, \$5.75@6.00; bakers' spring, best, \$3.60@5.75; do rye mixture, \$5.75@6.00; patent winter, \$3.75@6.00; straight winter, \$4.75@5.00; c'ear winter \$4.50@4.75; cracker, \$4.50@4.75; graham \$4.50@4.75; low grade, \$2.75@3.00; rye, \$3.00@3.25 per bbl. **OATMEAL**—Akron, \$6.00; Western \$5.75 per bbl; rolled oats, in cases, 72 lbs \$3.25. **CONMEAL**—Coarse, 85@90c; fine, 90@95c; granulated, \$1.50 per cwt. **MILLFEED**—City ground coarse winter, \$12.00@12.50; fine winter, \$12.00@12.50; finished, \$14.00@14.50 per ton; coarse spring, \$11.50@12.00; fine spring, 11.50@12.00.

Says the Minneapolis Market Record of September 4: The northwest wheat movement has reached fair proportions. One cause of delay in the movement this season has been the scarcity of help. The weather was good and farmers usually took their grain to stack. Help was too light to run the threshers and do harvesting and stacking at the same time. Many threshers had to wait, but they are now running in all quarters. A more unequal yield was never

raised, fields turning out 4 or 5 bushels in the vicinity of others reaching 20 to 30 bushels. There are few faults with quality anywhere excepting in a few patches injured by frost and a few others where the crop ripened unequally. It is all plump and with the few exceptions mentioned it is sound. No soaking rains have touched it to condemn it, and the smut talked of early has not shown in quality enough to prove very harmful. One Dakota farm in the vicinity of the James river, blown out last spring, threshed out less than a bushel an acre and yet every kernel was perfect. The damage suffered was not in the grain but in the straw, and that left to head ripened up perfect kernels. There was perhaps never a better crop of wheat in quality raised in the northwest than this one, and there are few that claim that there had been its equal.

There is fear that Canadians will be fed with pauper bread from the United States. The Canadian millers are now at Ottawa to show Sir John McDonald that the safety of Canadian mills depends on the protection of the domestic loaf. At the same time the Premier dreads to fight a political campaign with the cry of "a cheap loaf" against him. The heads of the Canadian people are set toward the quackery of the United States. The Americans tax themselves five times as much as they did before the war, and the Canadians believe the tax has made the taxpayers richer. The thought, therefore, of cutting slices off a loaf of bread that has paid no private tax to the millers grows obnoxious with every extension of the governmental levy.—Chicago Herald, Damphool Organ.

The consumptive requirement of wheat for the whole of France amounts to 176,000,000 bushels annually for a population of some 38,000,000; we find that each inhabitant requires about 7¼ bushels of wheat per annum. There are 41,400,000 bushels required for seeding, which puts the total consumption at 317,400,000 bushels. Estimates of the total production of France this year vary from 283,000,000 to 311,000,000 bushels.

The grand harvest holiday barbecue, held near Chillicothe to celebrate the glorious crops of northern Missouri, was attended by 15,000 people. Twenty beeves, 40 sheep and 30 pigs were roasted, and 8,000 loaves of bread were fed to the multitude.

From statistical notes it appears that the 1,880 bakers of Paris require annually 1,995,100 sacks of flour, which represents the consumption of wheat in Paris at 13,300,800 bushels.



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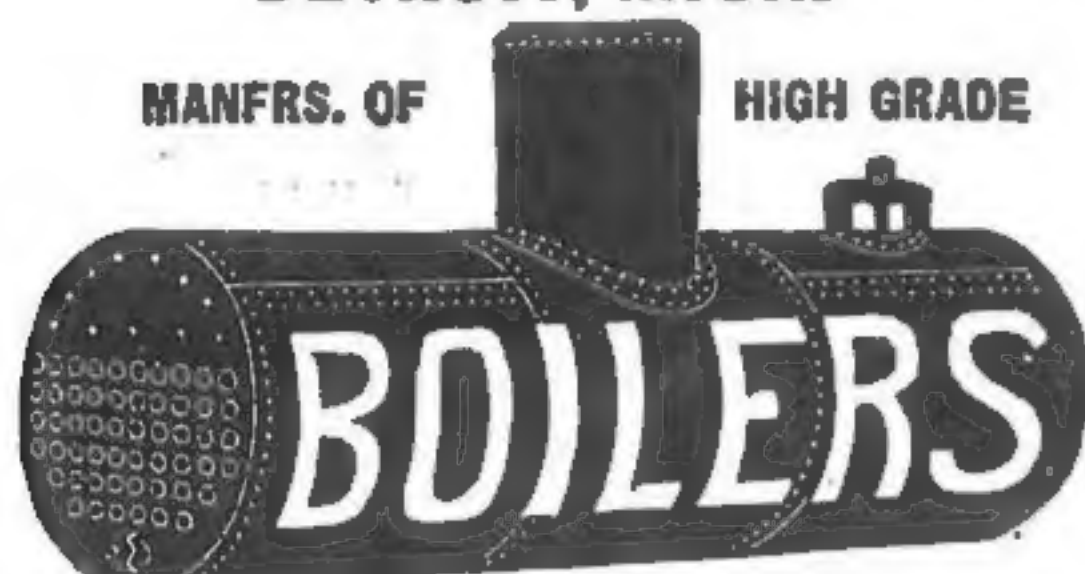
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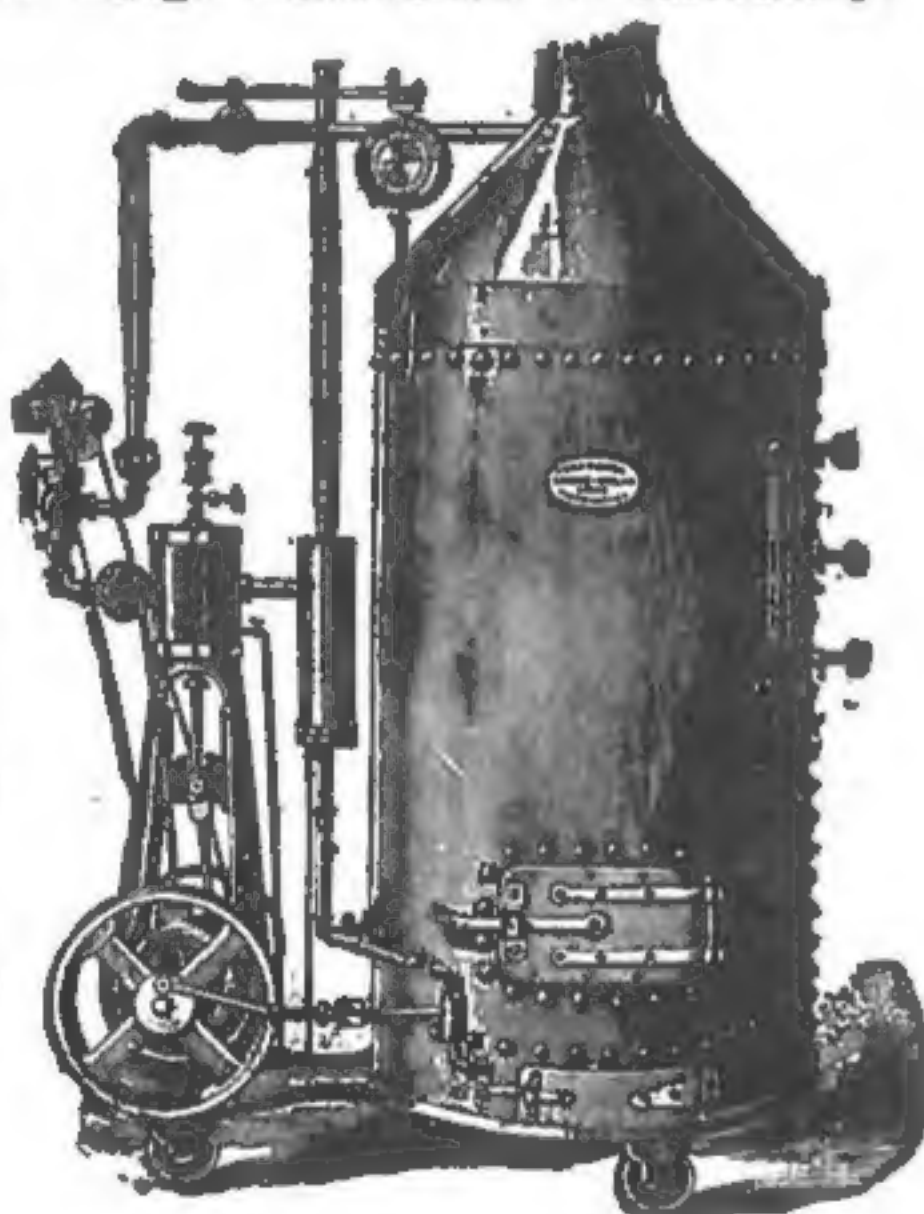
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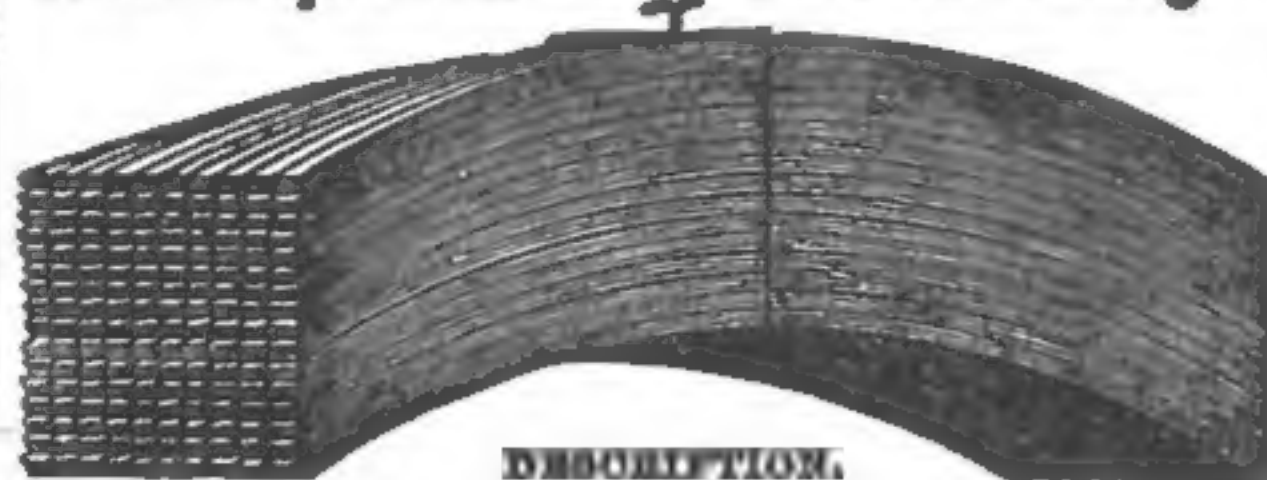
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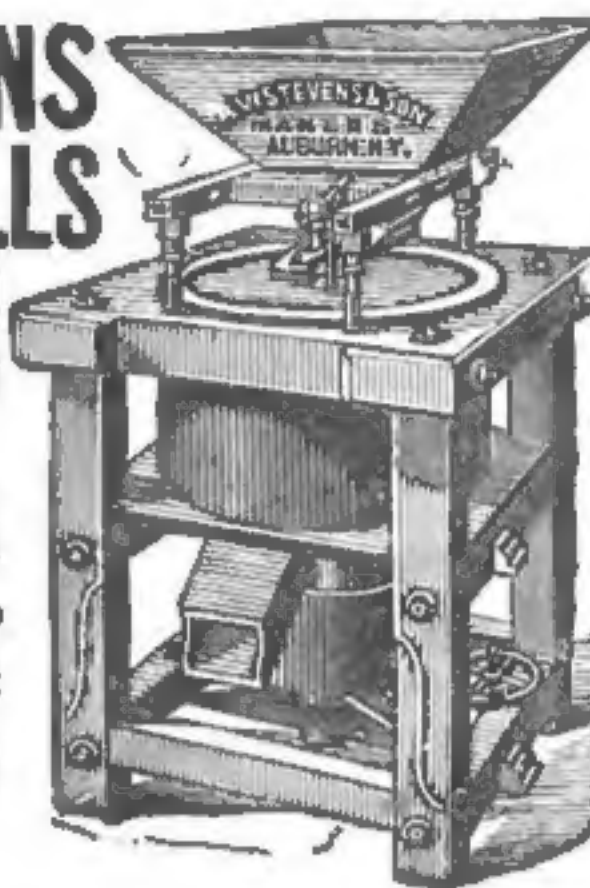
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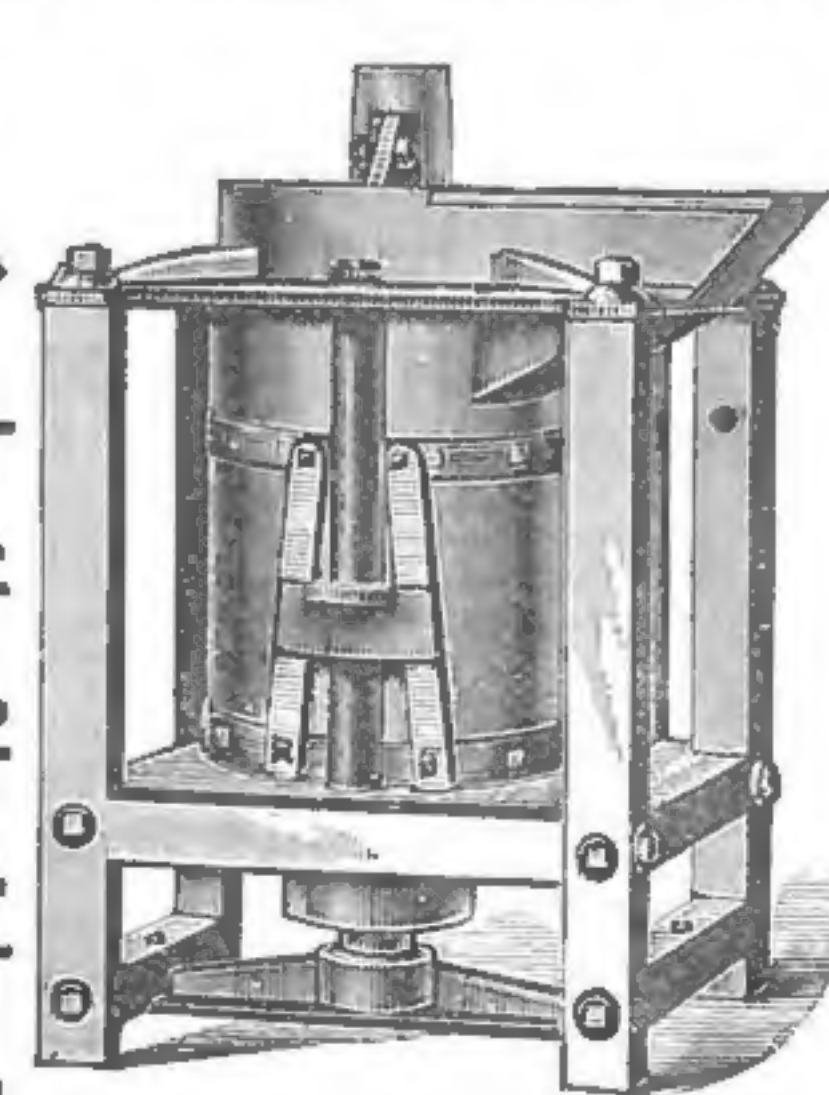
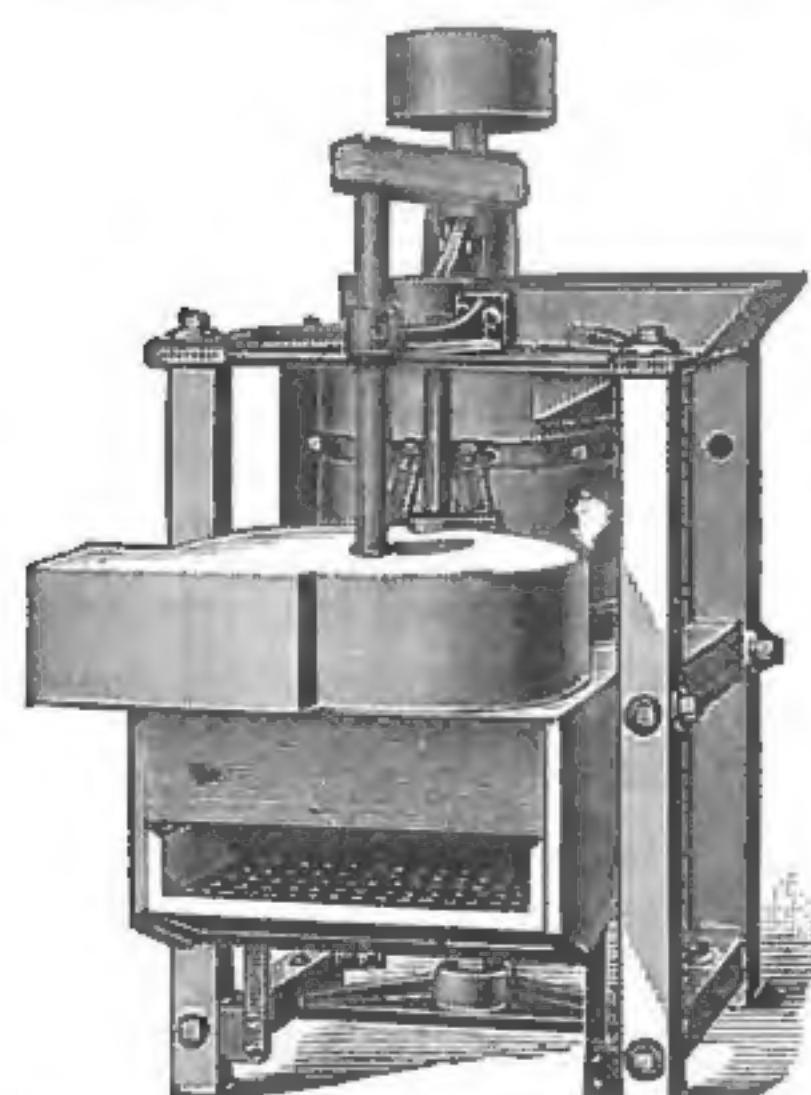
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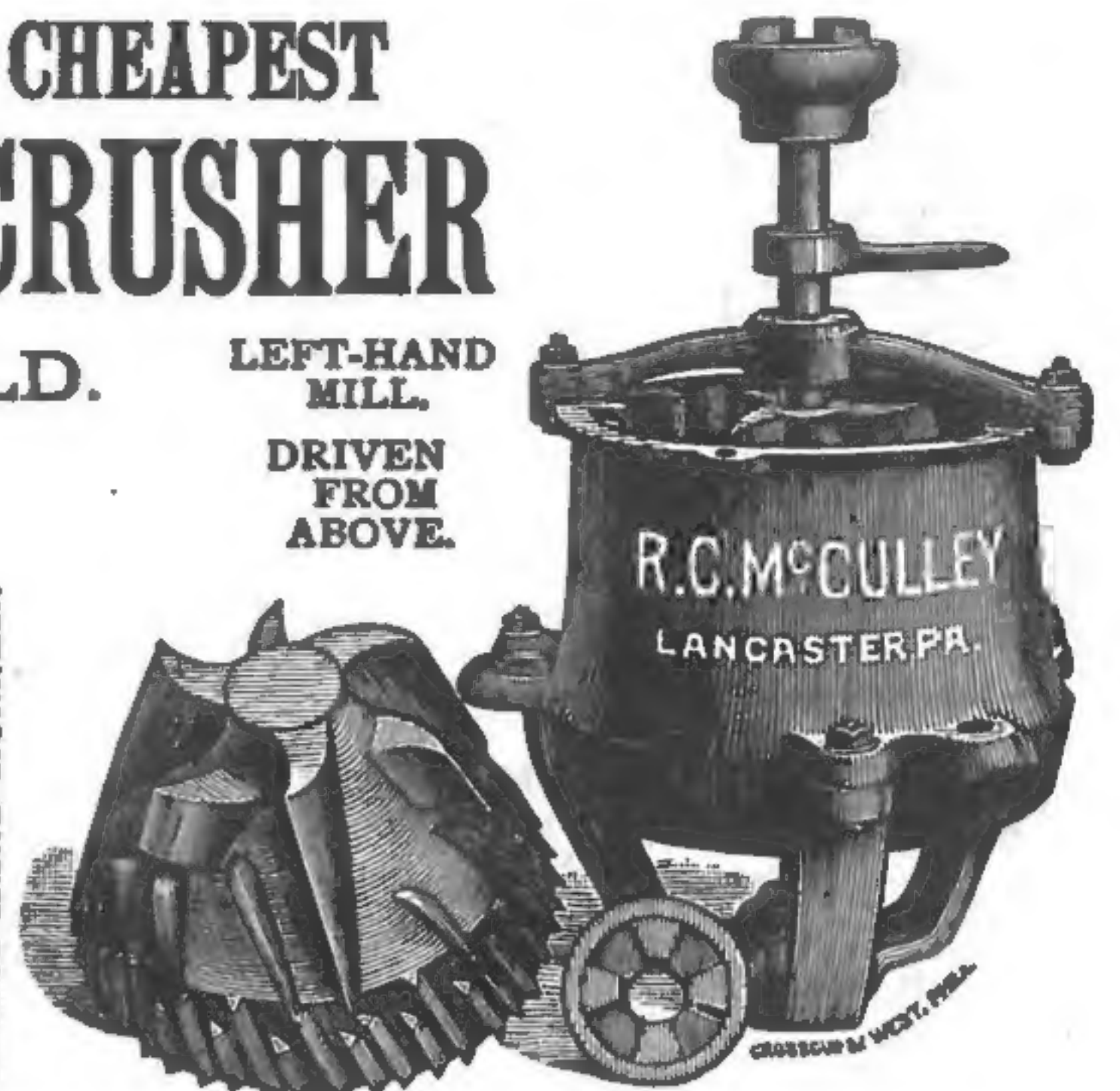
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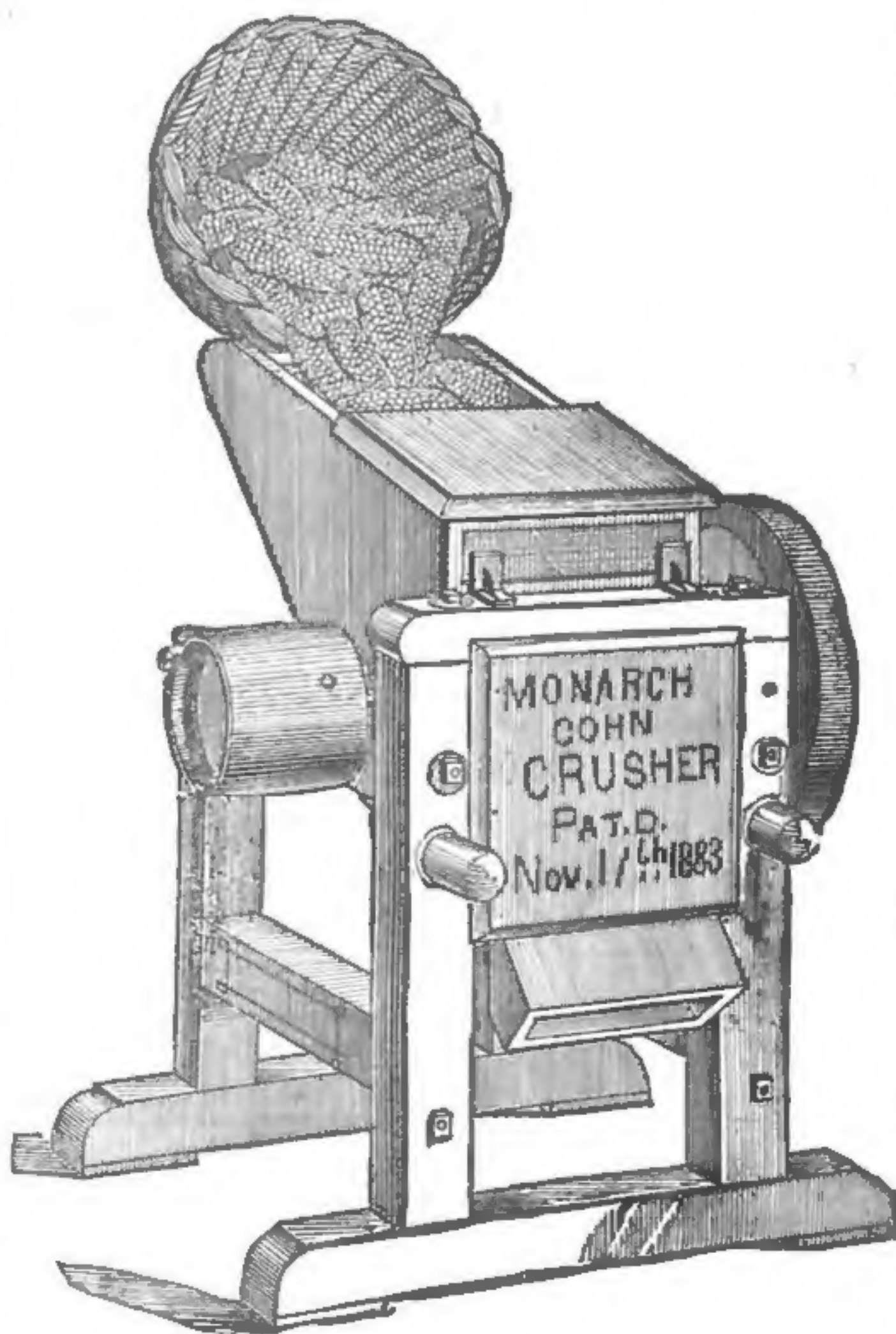


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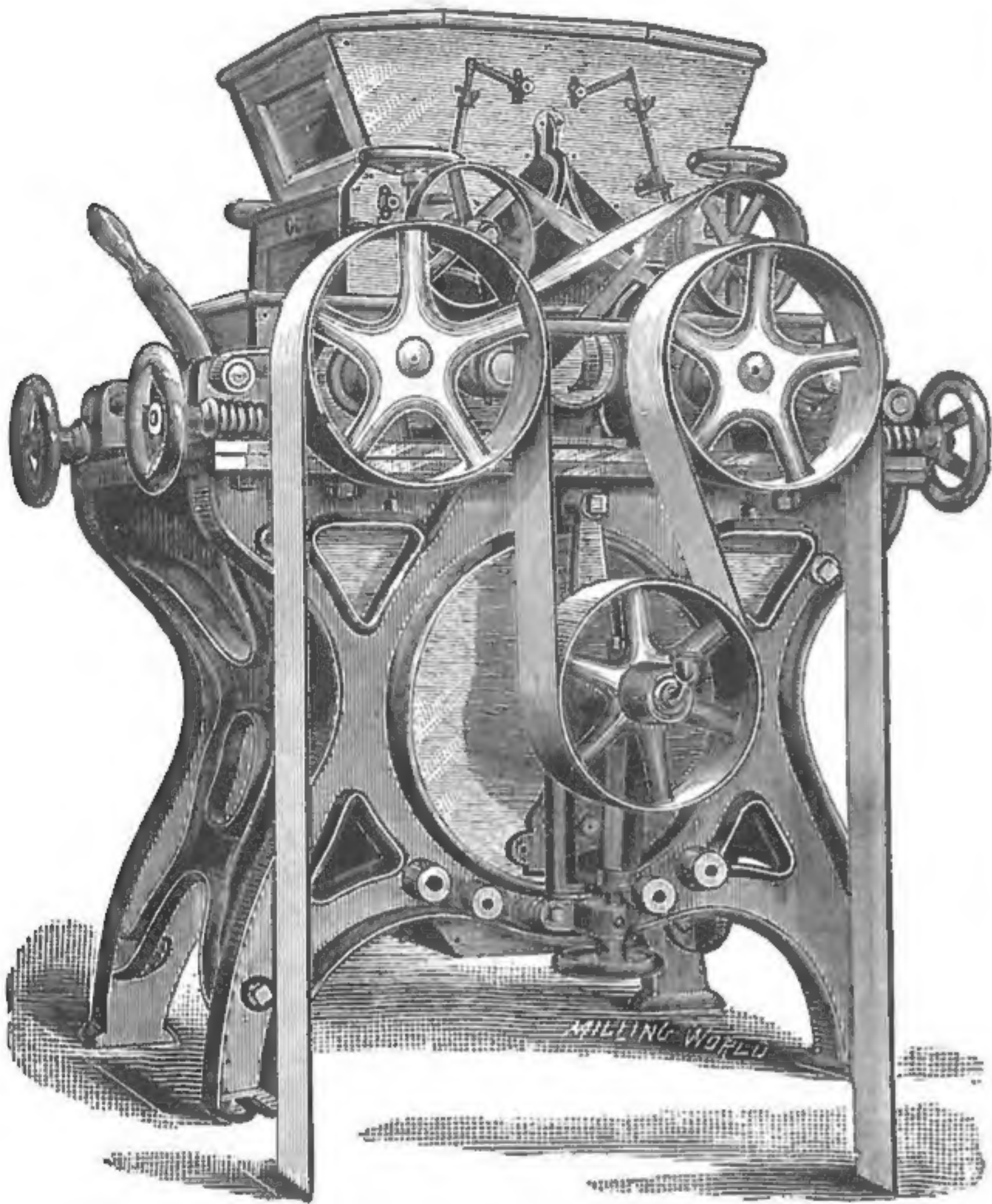


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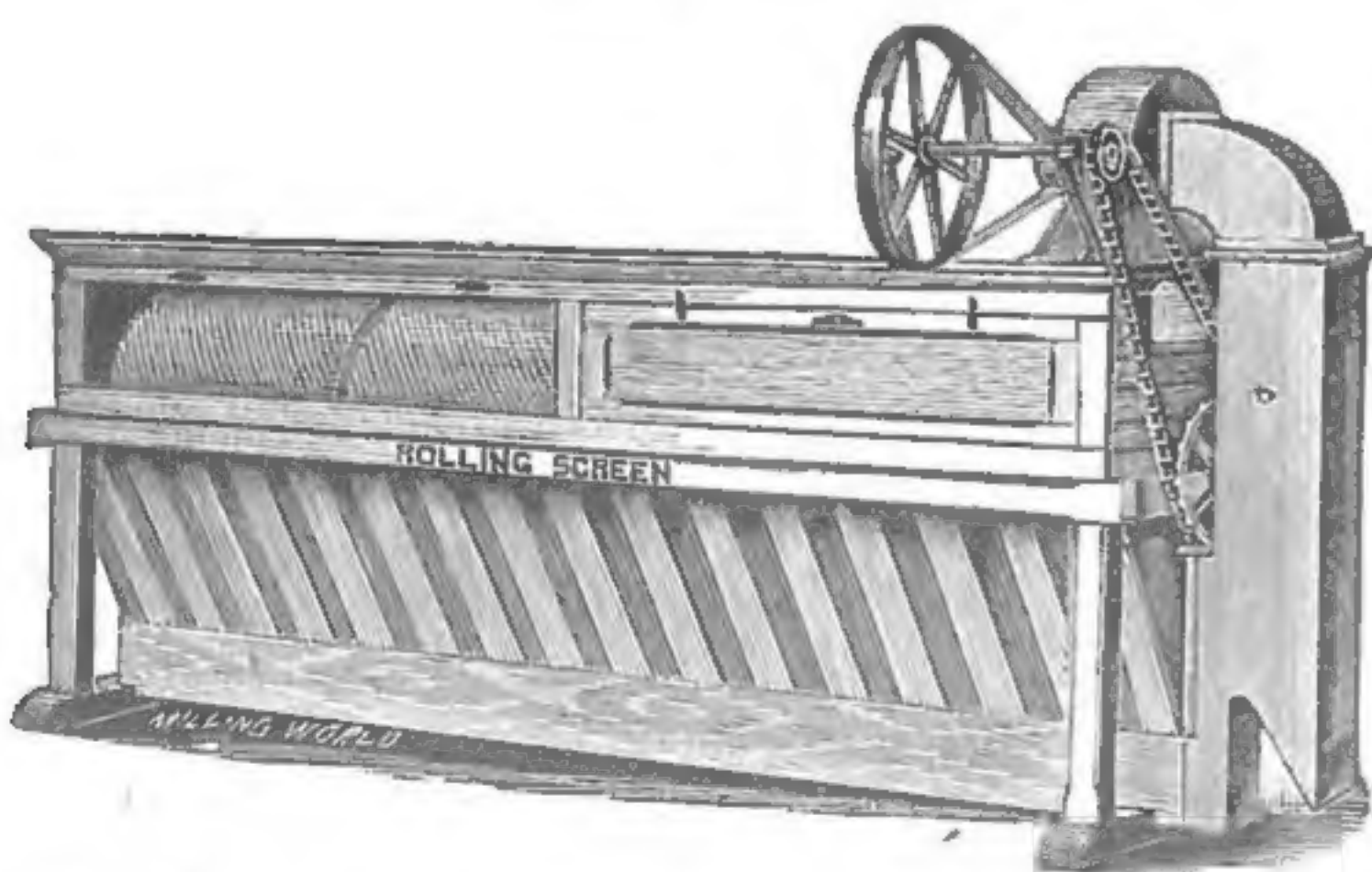
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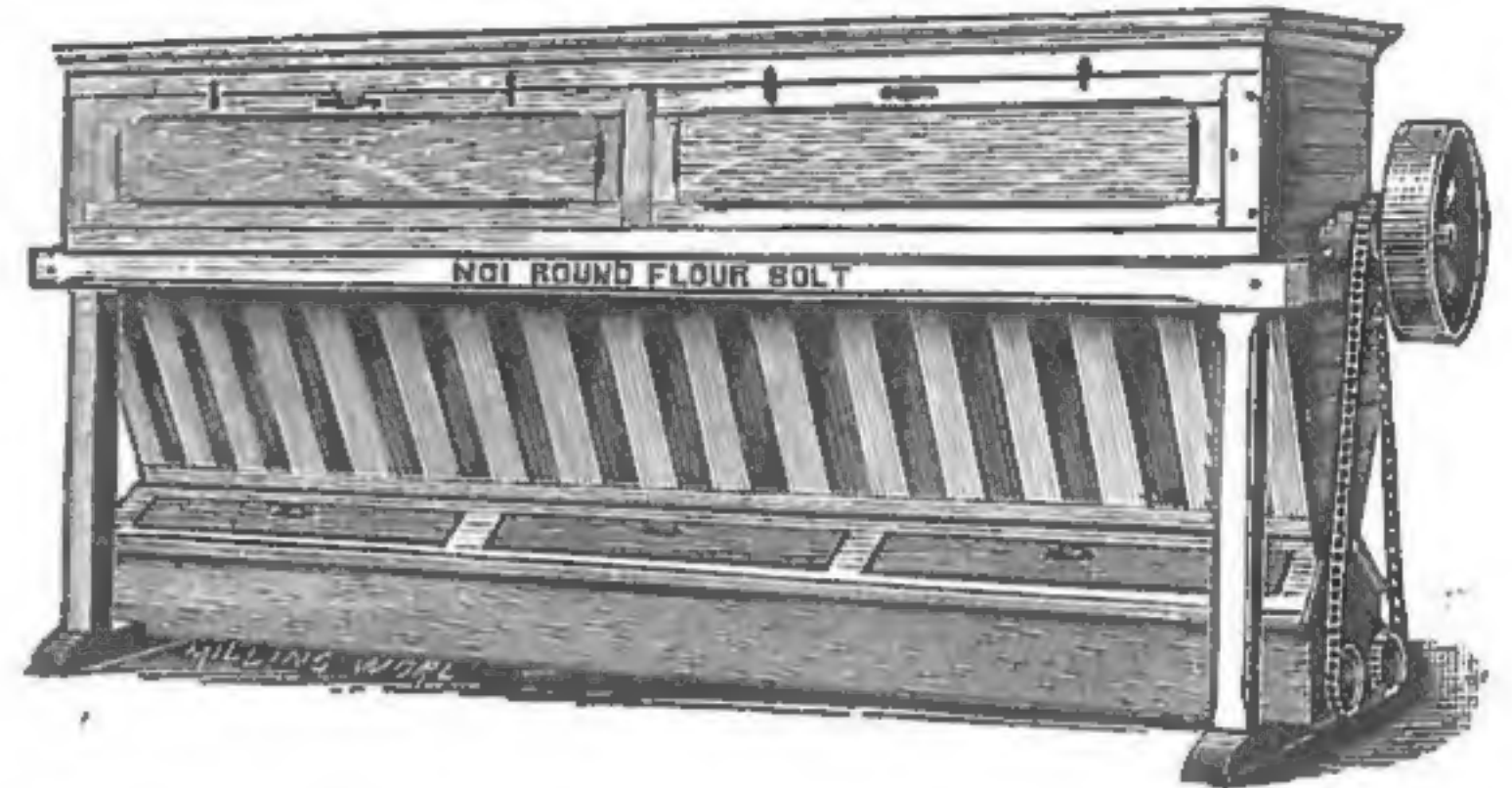
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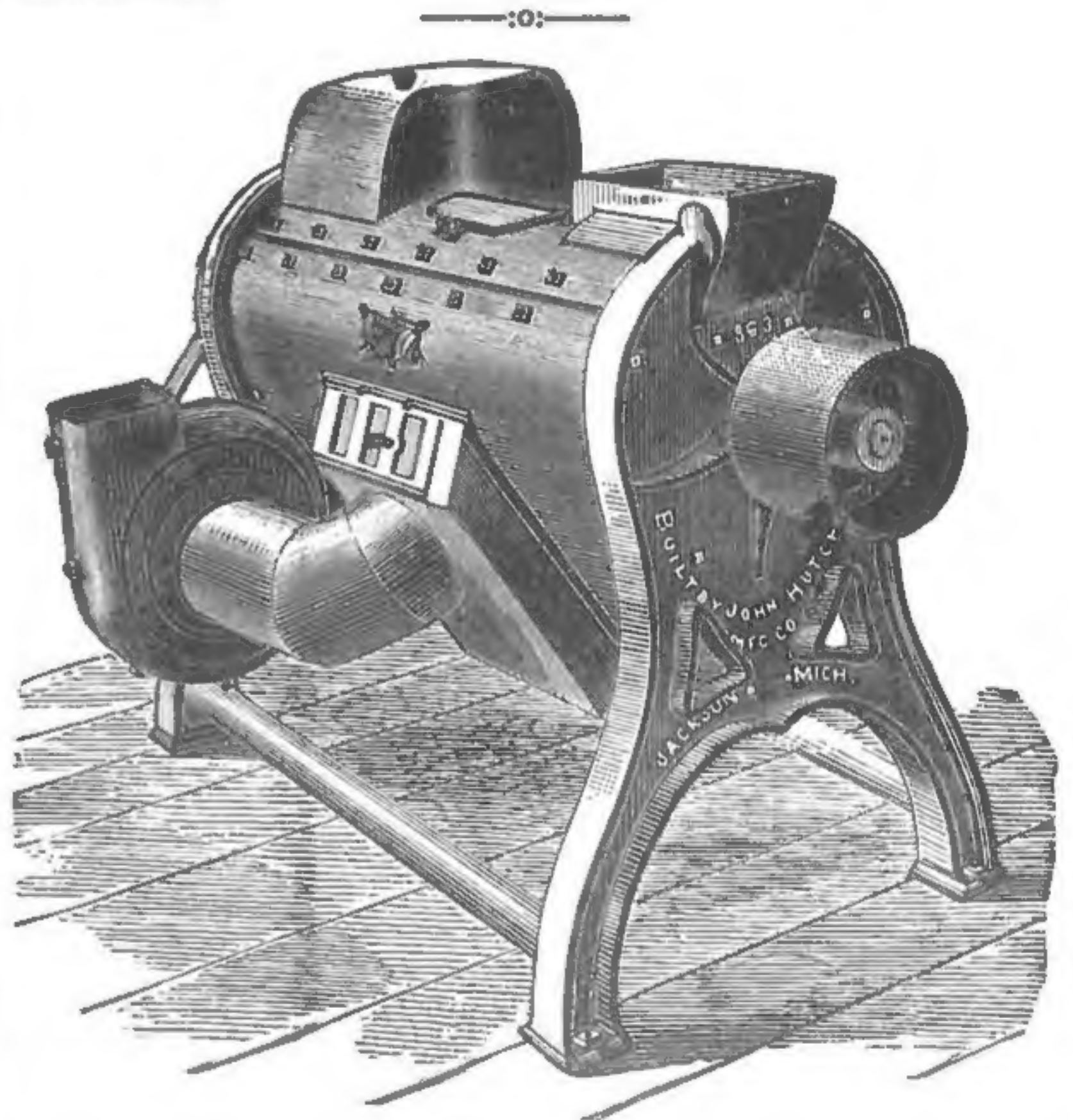


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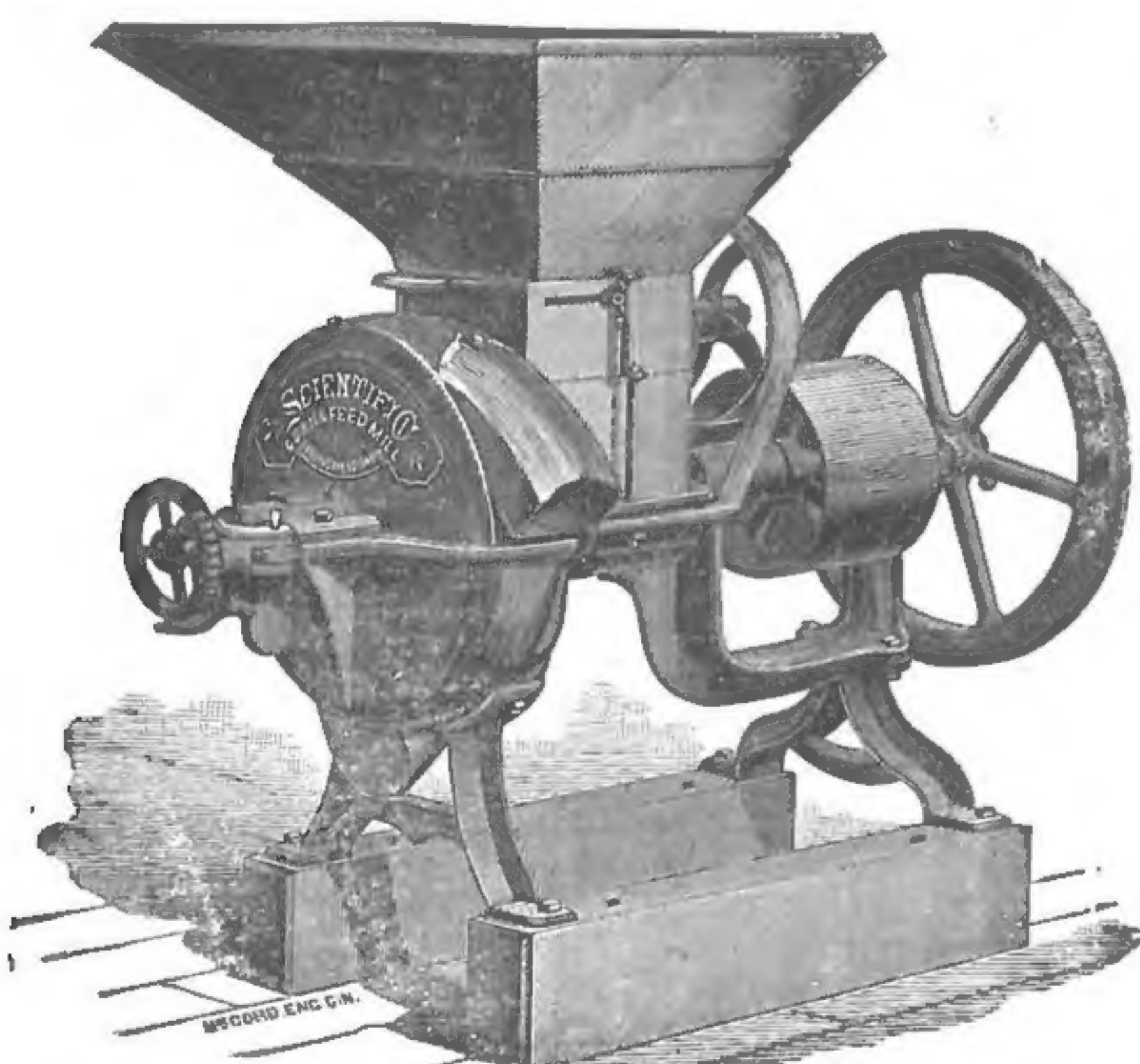
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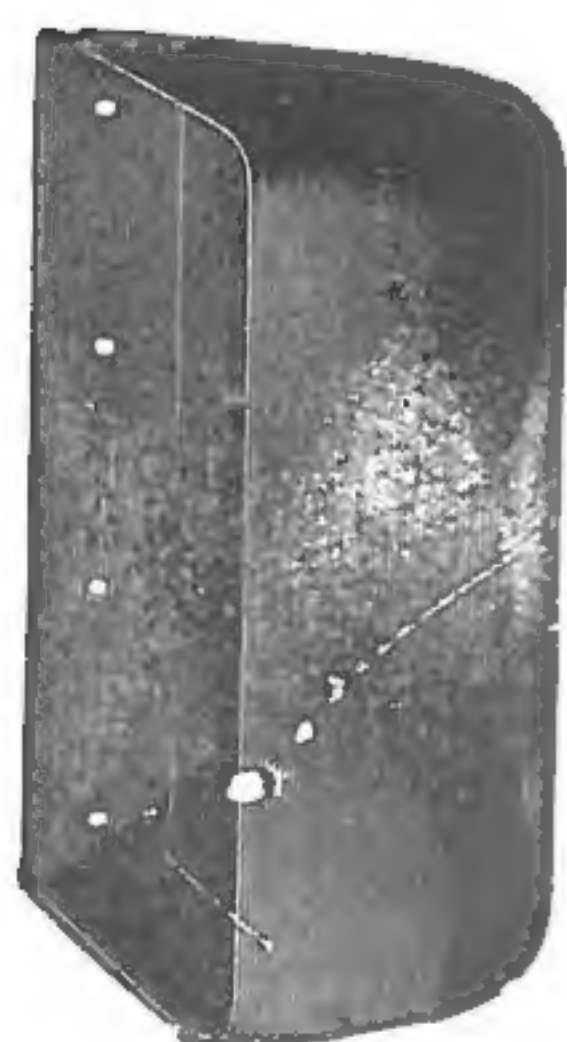
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